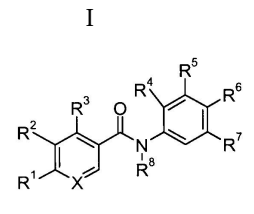
	(19) (12)	(KR) (A)	(11) (43)	10-2010-0039429 2010 04 15
(51)	Int. Cl.		(71)	
	<i>A61K 31/166</i> (2006.01) <i>A61K 31/167</i> (2006.01)			-
	<i>A61P 9/12</i> (2006.01) <i>A61P 25/00</i> (2006.01)			-4070 124
(21)	10-2010-7004579		(72)	
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		2010 03 02		-79618 14
(85)		2010 02 26		
(86)		PCT/EP2008/059698		-4410
(87)		WO 2009/016088	61	
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(30)			(74)	
	07113657.6 2007 08 02			
	(EPO) (EP)			
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(54)

(57)

(ADHD),

(CNS)



(72)

- 4305

2

- 4052

12

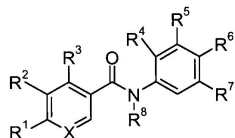
1

(ADHD),

(QNS)

I

I



R¹ , , , , NO₂ - (CH₂)_nS(O)₂R_n,
 -4 , -1- , -1- , -1- , 4 - -1- , 4 - -
 1- , 4 - -1- , -1- , 4 - -1- , 3,5- - -
 1- , C(O)O -1- , 1,1- -2- , -1- , -
 1- , 5,6 -4H -2- , -2- , NR' R' C(O)CF₃ ;

R² , , , , NO₂ - (CH₂)_nS(O)₂R_n - C(O)₂NR' R', -O C(=CH)-, -C(O)-
 2- , -4 , -1- -C(O)- ;

R¹ R² C -CH=CH-CH=CH -S- (CH₂)₄ ;

R³ , , ;

R⁴ , ;

R⁵ R⁷ , , , NO₂ , , O , -(CH₂)_nS(O)₂R_n NH(O)- , C(O)- , C(O)O
 2,5- -1- - ;

R⁶ , , , , , C(O)O , C(O)O (CH₂)₂NR' R', -5- ;

R⁵ R⁶ C -CH=CH-CH=CH ;

R⁸ ;

X -C(R)⁹= -N= ;

R⁹ , , NO₂ ;

R , -4 , -1- , , CH₂CN NR' R', -
 1- , -1- , 3,5- - -1- , -1- -1- ;

R R' , (CH)_n-4 -1- , (CH)_nCO- ,
 (CH)_n (CH)_nO ;

n 0, 1, 2, 3 ;

o 0, 1 .

2

1 ,

X -C(R)⁹= I .

3

2 ,

R¹ -4 , -1- , -1- , -1- , 4 - -1- , 4 - -
 1- , 4 - -1- , -1- , 4 - -1- , 3,5 - -
 1- , COO -1- , 1,1- -2- , -1- , -
 1- NR R' I .

4

3 ,

N(3 -)-4(4 - -1-)-3 - ;
 N(3 -)-3 -4 - ;
 4 -N(3 -)-3 - ;
 4 -N(3 -)-3 - ;
 4 -N(3 -)-3 - ;
 4 -1- -N(3 -)-3 - ;
 N(3 -)-3 -4 -1- - ;
 N(3 -)-3 -4 -1- - ;
 N(3 -)-3 -4 - ;
 N(3 -)-4 -1- -3 - ;
 4(2 -)-N(3 -)-3 - ;
 4 -1- -N(3 -)-3 - ;
 N(3 -)-4 -1- -3 - ;
 N(3 -)-4(4 - -1-)-3 - ;
 N(3 -)-4 -3 - ;
 4 -N(3 -)-3 - ;
 4 -N(3 -)-3 - ;
 4 -N(3 -)-3 - ;
 4 -N(3 -)-3 - ;
 N(3 -)-4 -4 -3 - ;

$N(3 \text{ - })-4 \text{ - } 1- \text{ - } 3 \text{ - } ;$
 $N(3 \text{ - })-4 \text{ - } 1- \text{ - } 3 \text{ - } ;$
 $N(3 \text{ - })-4 \text{ - } 1- \text{ - } 3 \text{ - } ;$
 $N(3 \text{ - })-4 \text{ - } 1- \text{ - } 3 \text{ - } ;$
 $N(3 \text{ - })-4 \text{ - } 1- \text{ - } 3 \text{ - } ;$
 $N(3 \text{ - })-4 \text{ - } 1- \text{ - } 3 \text{ - } ;$
 $N(3 \text{ - })-4 \text{ - } 1- \text{ - } 3 \text{ - } ;$
 $4 \text{ - } 1- \text{ - } Nm \text{ - } 3 \text{ - } ;$
 $N(3 \text{ - })-4 \text{ - } 1- \text{ - } 3 \text{ - } ;$
 $4 \text{ - } 1- \text{ - } N[3(1,1,2,2 \text{ - })-]-3 \text{ - } ;$
 $(\text{ , })-4(3,5 \text{ - } 1-)-N(3 \text{ - })-3 \text{ - } ;$
 $4 \text{ - } 1- \text{ - } N(3 \text{ - })-3 \text{ - } ;$
 $4(4 \text{ - } 1-)-N(3 \text{ - })-3 \text{ - } ;$
 $N(3 \text{ - })-3 \text{ - } 4(4 \text{ - } 1-)-$

I

5

1 ,
 $X \text{ - } N \text{ - } I \text{ .}$

6

5 ,
 $R^1 \text{ - } 4 \text{ , } 1- \text{ , } 1- \text{ , } 1- \text{ , } 4 \text{ - } 1- \text{ , } 4 \text{ - } -$
 $1- \text{ , } 4 \text{ - } 1- \text{ , } 1- \text{ , } 4 \text{ - } 1- \text{ , } 3,5 \text{ - } -$
 $1- \text{ , } \alpha\alpha\alpha \text{ - } 1- \text{ , } 1,1- \text{ - } 2- \text{ , } 1- \text{ , } -$
 $1- \text{ - } NR' \text{ - } I \text{ .}$

7

6 ,
 $N(3 \text{ - })-6 \text{ - } 1- \text{ - } ;$
 $N(3 \text{ - })-6(4 \text{ - } 1-)-$
 $5 \text{ - } N(3 \text{ - })-6 \text{ - } ;$
 $5 \text{ - } N(3 \text{ - })-6 \text{ - } ;$
 $5 \text{ - } N(3 \text{ - })-6(2 \text{ - })-$
 $5 \text{ - } N(3 \text{ - })-6 \text{ - } 1- \text{ - } ;$
 $3- \text{ - } 4 \text{ - } 3,4,5,6 \text{ - } 2H[1,2] \text{ - } 5- \text{ - } (3 \text{ - })-$
 $5 \text{ - } N(3 \text{ - })-6 \text{ - } ;$
 $5 \text{ - } N(3 \text{ - })-6 \text{ - } ;$

6 -5 -N(3 -)- ;
 6 -1- -5 -N(3 -)- ;
 3- -3,4,5,6 -2H[1,2] -5- (3 -)- ;
 5 -N(3 -)-6(4 - -1-)- ;
 N(3 -)-6 -1- -5 - ;
 6 -N(3 -)-5 - ;
 6 -N(3 -)-5 - ;
 4 -3- -3,4,5,6 -2H[1,2] -5- (3 -)- ;
 ;
 5 -N(3 -)-6 -1- - ;
 3- -4 -3,4,5,6 -2H[1,2] -5- (3 -)- ;
 6 -5 -N(3 -)- ;
 5 -N(3 -)-6 -1- -
 I .

8

2 ,
 R^1 I .

9

8 ,
 4 -N -3 - ;
 4 -N(3 -)-3 - ;
 4 -N(3 -)-3 - ;
 3 -4 -N(3 -)- ;
 3 -4 -N(3 -)- ;
 4 -N(3 -)-3 - ;
 4 -N(3 -)-3 - ;
 3,4 -N[3(2,5 - -1-)-]- ;
 3,4 -N - ;
 4 -N(3 -)-3 - ;
 3,4 -N - ;
 3,3,4 ;
 3,4 -N(3 -)-
 I .

10

2 ,

R¹ I .

11

10 ,
3 -4 -N - ;

4 -N -3 -
I .

12

2 ,
R¹ I .

13

12 ,
N(3 4 -)-3 - I .

14

5 ,
R¹ I .

15

14 ,
5,6 -N(3 -)- ;

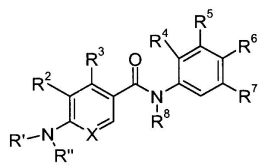
5,6 -N(3 -)- ;

6 -N(3 -)-5 -
I .

16

IA :

IA



R² , , , , , , , , , ,
, NO₂ -(CH₂)₆S(O₂R - O₂NR' R', -O C(=CH₂)-, -C(O)- , -

2- , -4 , -1- -O(O)- ;

R³ , , ;

R⁴ , ;

R^5 R^7 , , , , NO_2 , ,
 , , , O , $-(CH_2)_5SO_2R$ $NH(O-$, $CO-$, COO
 2,5- - -1- - ;

R^6 , , , , , , ,
 , COO , $COO(CH_2)_2NR'R''$, -5 ;

R^5 R^6 C - $CH=CHCH=CH$;

R^8 ;

$X-C(R^9)=$ - $N=$;

R^9 , , NO_2 ;

R , -4 , -1- , , CH_2CN $NR'R''$, -
 1- , -1- , 3,5- - -1- , -1- -1- ;

R R' , , $(CH_2)_{n-4}$ -1- , $(CH_2)_nCO-$,
 $(CH_2)_n$ $(CH_2)_nO$;

n 0, 1, 2 3 ;

o 0 1 ,

:

4 - $N=$ - ;

4 -3 - $N=$ - ;

4 - $N=$ - .

17

16 ,

$N(3-$ -)-3 -4 - ;

4 - $N(3-$ -)-3 - ;

4 - $N(3-$ -)-3 - ;

4 - $N(3-$ -)-3 - ;

$N(3-$ -)-3 -4 - ;

4(2- -)- $N(3-$ -)-3 - ;

$N(3-$ -)-4 -3 - ;

4 - $N(3-$ -)-3 - ;

4 - $N(3-$ -)-3 - ;

4 - $N(3-$ -)-3 - ;

4 - $N(3-$ -)-3 - ;

6 - $N(3-$ -)-5 - ;

6 - $N(3-$ -)-5 - ;

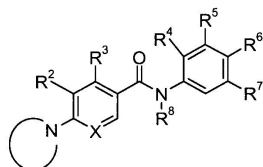
6 -5- -N(3 -)-

IA .

18

IB :

IB



-4 , -1- , -1- , -1- , 4 - -1- , 4 -
 -1- , 4 - -1- , -1- , 4 - -1- , 3,5- -
 -1- , COO -1- , 1,1- -1- , -1-
 -1- ;

R² , , , , , , ,
 , NO₂ -(CH₂)₀S(O)₂R -S(O)₂NR' , -O-C(=CH)- , -C(O)- ,
 2- , -4 , -1- -C(O)- ;

R³ , , ;

R⁴ , ;

R⁵ R⁷ , , , , NO₂ ,
 , , O , -(CH₂)₀S(O)₂R NH(O)- , CO- , COO
 2,5- -1- - ;

R⁶ , , , , , , ,
 , COO , COO(CH₂)_zNR' , -5- ;

R⁵ R⁶ C -CH=CH-CH=CH ;

R⁸ ;

X -C(R)⁹= -N= ;

R⁹ , , NO₂ ;

R , -4 , -1- , , CHCN NR' , -
 1- , -1- , 3,5- - -1- , -1- -1- ;

R R' , , (CH₂)_{n-4} -1- , (CH₂)_n-C(O)- ,
 (CH₂)_n (CH₂)_n-O ;

n 0, 1, 2, 3 ;

o 0, 1 .

19

18 ,

$N(3 -)-4(4 - -1 -)-3 - ;$

$4 -1- -N(3 -)-3 - ;$

$N(3 -)-3 -4 -1- - ;$

$N(3 -)-3 -4 -1- - ;$

$N(3 -)-4 -1- -3 - ;$

$4 -1- -N(3 -)-3 - ;$

$N(3 -)-4 -1- -3 - ;$

$N(3 -)-4(4 - -1 -)-3 - ;$

$N(3 -)-4 -4 -3 - ;$

$N(3 -)-4 -1- -3 - ;$

$N(3 -)-4 -1- -3 - ;$

$N(3 -)-4 -1- -3 - ;$

$N(3 -)-4 -1- -3 - ;$

$N(3 -)-4 -1- -3 - ;$

$N(3 -)-4 -1- -3 - ;$

$N(3 -)-4 -1- -3 - ;$

$4 -1- -Nm -3 - ;$

$N(3 -)-4 -1- -3 - ;$

$4 -1- -N[3(1,1,2,2 -)-]-3 - ;$

$(,)-4(3,5 - -1 -)-N(3 -)-3 - ;$

$4 -1- -N(3 -)-3 - ;$

$4(4 - -1 -)-N(3 -)-3 - ;$

$N(3 -)-3 -4(4 - -1 -)- ;$

$4 -3 - -3,4,5,6 -2H[1,2] -5 - (3 -)-$
 $;$

$5 -N(3 -)-6 -1- - ;$

$3 - -3,4,5,6 -2H[1,2] -5 - (3 -)-$
 $;$

$3 - -4 -3,4,5,6 -2H[1,2] -5 - (3 -)-$
 $;$

$5 -N(3 -)-6 -1- -$

IB

20

16 19

21

20

(ADHD),

(CNS)

22

21

(CNS)

(ADHD)

23

[0001]

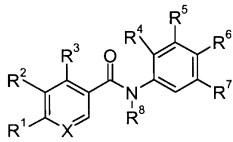
(ADHD),

(CNS)

I

[0002]

[I]



[0003]

[0004]

[0005]

R^1 , NO_2 , $-(CH_2)_nS(O)_2R$, -4 , $-1-$, $-1-$, $-1-$, 4 , $-1-$, 4 , $1-$, 4 , $-1-$, $-1-$, 4 , $-1-$, $3,5$, $1-$, $C(O)O$, $-1-$, $1,1-$, $-2-$, $-1-$, $1-$, $5,6$, $-4H$, $-2-$, $-2-$, NR^1R' , $C(O)CF_3$;

[0006]

R^2 , NO_2 , $-(CH_2)_nS(O)_2R$, $-C(O)_2NR^1R'$, $-O-C(=CH_2)-$, $-C(O)-$, $2-$, -4 , $-1-$, $-C(O)-$;

[0007]

R^1 , R^2 , C , $-CH=CH-CH=CH-$, $-S-(CH_2)_4-$;

[0008]

R^3 ;

TA p- , - ,
 ([Usdin, E and Sandler, M eds. (1984) Trace Amines and the brain, Dekker.]).
 ([Lindenann, L and Heber, M (2005) A renaissance in trace amines inspired by a novel GPCR family. Trends in Pharmacol. Sci. 26, 274-281]),
 ([Branchek, T.A and Blackburn, T.P. (2003) Trace amine receptors as targets for novel therapeutics: legend, myth and fact. Curr. Opin. Pharmacol. 3, 90-97; and Prenant, R.T. et al. (2001) Following the trace of elusive amines. Proc. Natl. Acad. Sci. U.S.A. 98, 9474-9475])

[0024]

TA CNS TA
 ([Musseau, D.D and Butterworth, R.F. (1995) A high-affinity [³H] tryptamine binding site in human brain. Prog. Brain Res. 106, 285-291; and McCormack, J.K et al. (1986) Autoradiographic localization of tryptamine binding sites in the rat and dog central nervous system. J. Neurosci. 6, 94-101]). TA
 ([Prenant, R.T. et al. (2001) Proc. Natl. Acad. Sci. U.S.A. 98, 9474-9475; Dyck, L.E (1989) Release of some endogenous trace amines from rat striatal slices in the presence and absence of a monoamine oxidase inhibitor. Life Sci. 44, 1149-1156; and Parker, E.M and Cubeddu, L.X (1988) Comparative effects of amphetamine, phenylethylamine and related drugs on dopamine efflux, dopamine uptake and mazindol binding. J. Pharmacol. Exp. Ther. 245, 199-210]).
 (TAAR) GPCR
 ([Lindenann, L and Heber, M (2005) Trends in Pharmacol. Sci. 26, 274-281; and Lindenann, L et al. (2005) Trace amine associated receptors form structurally and functionally distinct subfamilies of novel G protein-coupled receptors. Genomics 85, 372-385]). 9
 TAAR (3) 16 (1)
 TAAR (, TAAR2 1),
 GPCR
 3 ([Lindenann, L and Heber, M (2005) Trends in Pharmacol. Sci. 26, 274-281; and Lindenann, L et al. (2005) Genomics 85, 372-385]). TAAR1 4 (TAAR1 4)
 1 TA G TAAR1 TA ,
 TAAR1

[0025]

TAAR CNS ,
 (ADHD), - , ,
 ; , , ,

[0026]

N - CNS ([Catherow J. W et al. (1994) J. Med. Chem 37(15), 2253-2257; WO 97/03967; WO 99/65449; WO 02/053544; WO 02/059080 and US 2003/0105135 A1]), CNS

- [0044] 4 -1- -N(3 -)-3 - ;
- [0045] N(3 -)-3 -4 -1- - ;
- [0046] N(3 -)-3 -4 -1- - ;
- [0047] N(3 -)-3 -4 - ;
- [0048] N(3 -)-4 -1- -3 - ;
- [0049] 4(2 -)-N(3 -)-3 - ;
- [0050] 4 -1- -N(3 -)-3 - ;
- [0051] N(3 -)-4 -1- -3 - ;
- [0052] N(3 -)-4(4 - -1-)-3 - ;
- [0053] N(3 -)-4 -3 - ;
- [0054] 4 -N(3 -)-3 - ;
- [0055] 4 -N(3 -)-3 - ;
- [0056] 4 -N(3 -)-3 - ;
- [0057] 4 -N(3 -)-3 - ;
- [0058] N(3 -)-4 -4 -3 - ;
- [0059] N(3 -)-4 -1- -3 - ;
- [0060] N(3 -)-4 -1- -3 - ;
- [0061] N(3 -)-4 -1- -3 - ;
- [0062] N(3 -)-4 -1- -3 - ;
- [0063] N(3 -)-4 -1- -3 - ;
- [0064] N(3 -)-4 -1- -3 - ;
- [0065] N(3 -)-4 -1- -3 - ;
- [0066] N(3 -)-4 -1- -3 - ;
- [0067] 4 -1- -Nm -3 - ;
- [0068] N(3 -)-4 -1- -3 - ;
- [0069] 4 -1- -N[3(1,1,2,2 -)-]-3 - ;
- [0070] (,)-4(3,5 - -1-)-N(3 -)-3 - ;
- [0071] 4 -1- -N(3 -)-3 - ;
- [0072] 4(4 - -1-)-N(3 -)-3 - ;
- [0073] N(3 -)-3 -4(4 - -1-)-
- [0074] X -N¹ , R¹ -4 , -1- , -1- , -1- , 4 - -1- , 4 - -1- , 4 - -1- , 3,5 - -1- , C(OO -1- , 1,1- -2 , -1- , -1- NR R' , :
- [0075] N(3 -)-6 -1- - ;
- [0076] N(3 -)-6(4 - -1-)-

- [0077] 5 -N(3 -)-6 - ;
- [0078] 5 -N(3 -)-6 - ;
- [0079] 5 -N(3 -)-6 (2 -)- ;
- [0080] 5 -N(3 -)-6 -1- - ;
- [0081] 3 - -4 -3 4 5 6 -2H[1,2] -5- (3 -)- ;
- [0082] 5 -N(3 -)-6 - ;
- [0083] 5 -N(3 -)-6 - ;
- [0084] 6 -5 -N(3 -)- ;
- [0085] 6 -1- -5 -N(3 -)- ;
- [0086] 3 - -3 4 5 6 -2H[1,2] -5- (3 -)- ;
- [0087] 5 -N(3 -)-6 (4 - -1-)- ;
- [0088] N(3 -)-6 -1- -5- - ;
- [0089] 6 -N(3 -)-5- - ;
- [0090] 6 -N(3 -)-5- - ;
- [0091] 4 -3- -3 4 5 6 -2H[1,2] -5- (3 -)- ;
- [0092] 5 -N(3 -)-6 -1- - ;
- [0093] 3 - -4 -3 4 5 6 -2H[1,2] -5- (3 -)- ;
- [0094] 6 -5 -N(3 -)- ;
- [0095] 5 -N(3 -)-6 -1- - .
- [0096] $X - C(\mathbb{R})^9 = , R^1 I ,$
:
- [0097] 4 -N -3 - ;
- [0098] 4 -N(3 -)-3 - ;
- [0099] 4 -N(3 -)-3 - ;
- [0100] 3 -4 -N(3 -)- ;
- [0101] 3 -4 -N(3 -)- ;
- [0102] 4 -N(3 -)-3 - ;
- [0103] 4 -N(3 -)-3 - ;
- [0104] 3 4 -N[3 (2 5 - -1-)-]- ;
- [0105] 3 4 -N - ;
- [0106] 4 -N(3 -)-3 - ;
- [0107] 3 4 -N - ;
- [0108] 3 3 , 4 ;
- [0109] 3 4 -N(3 -)- .
- [0110] $X - C(\mathbb{R})^9 = , R^1 I ,$

:

[0111] 3-4-N-;

[0112] 4-N-3-;

[0113] X-C(R)⁹=, R¹ I, :

[0114] N(3,4-)-3-;

[0115] X-N=, R¹ I, :

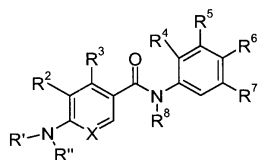
[0116] 5,6-N(3-)-;

[0117] 5,6-N(3-)-;

[0118] 6-N(3-)-5-;

[0119] IA :

[0120] [IA]



[0121]

[0122],

[0123] R², NO₂, -(CH₂)₂S(O)₂R, -OS(O)₂NR', -O-C(=CH)-, -C(O)-, -1- -CO(O)-;

[0124] R³, ;

[0125] R⁴, ;

[0126] R⁵, R⁷, NO₂, O, -(CH₂)₂S(O)₂R, NH(O)-, C(O)-, COO, 2,5- -1- ;

[0127] R⁶, COO, COO(CH₂)₂NR', -5- ;

[0128] R⁵, R⁶, C, -CH=CH-CH=CH- ;

[0129] R⁸, ;

[0130] X-C(R)⁹= -N= ;

[0131] R⁹, NO₂, ;

[0132] R, -4, -1-, CH₂CN, NR', -1-, -1-, 3,5- -1-, -1-, -1- ;

[0133] R, R', (CH₂)_{n-4} -1-, (CH₂)_n-C(O)-, (CH₂)_n- (CH₂)_n-O ;

[0134] n 0, 1, 2, 3 ;

[0135] o 0, 1 .

[0136] , :

[0137] N(3-)-3 -4 - ;

[0138] 4 -N(3-)-3 - ;

[0139] 4 -N(3-)-3 - ;

[0140] 4 -N(3-)-3 - ;

[0141] N(3-)-3 -4 - ;

[0142] 4(2-)-N(3-)-3 - ;

[0143] N(3-)-4 -3 - ;

[0144] 4 -N(3-)-3 - ;

[0145] 4 -N(3-)-3 - ;

[0146] 4 -N(3-)-3 - ;

[0147] 4 -N(3-)-3 - ;

[0148] 6 -N(3-)-5 - ;

[0149] 6 -N(3-)-5 - ;

[0150] 6 -5 -N(3-)-

[0151] :

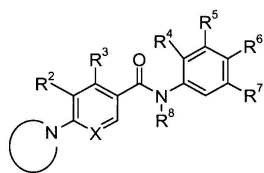
[0152] 4 -N - ;

[0153] 4 -3 -N - ;

[0154] 4 -N - .

[0155] IB :

[0156] [IB]



[0157]

[0158]

[0159] $\text{N}^{\frac{1}{2}}$ -4 , -1- , -1- , -1- , 4 - -1- , 4 - -1- , 4 - -1- , 3,5 - -1- , C(O)O -1- , 1,1- -1- , -1- ;

[0160] R^2 , , , , , , , NO_2 , $-(\text{CH}_2)_n\text{S}(\text{O})_2\text{R}$, $-\text{C}(\text{O})_2\text{NR}'$, $-\text{O}-\text{C}(\text{=CH})-$, $-\text{C}(\text{O})-$, 2- , -4 , -1- $-\text{C}(\text{O})-$;

[0161] R^3 , , ;

- [0162] R^4 , ;
- [0163] R^5 R^7 , , , , NO_2 , , O , $-(CH_2)_nSO_2R$ $NH(O-$, $C(O-$, $C(OO$, $2,5-$ - $-1-$ - ;
- [0164] R^6 , , , , , , , , $C(OO$, $C(OO(CH_2)_2NR'R'$, $-5-$;
- [0165] R^5 R^6 C - $CH=CHCH=CH$;
- [0166] R^8 ;
- [0167] X - $C(R^9)=$ - $N=$;
- [0168] R^9 , , NO_2 ;
- [0169] R , -4 , $-1-$, , CH_2CN $NR'R'$, - $1-$, $-1-$, $3,5-$ - $-1-$, $-1-$ $-1-$;
- [0170] R R' , , $(CH_2)_{n-4}$ - $1-$, $(CH_2)_nC(O-$, $(CH_2)_n$ $(CH_2)_nO$;
- [0171] n $0, 1, 2, 3$;
- [0172] o $0, 1$.
- [0173] , :
- [0174] $N(3-$ - $)$ - $4(4-$ - $-1-$)- $3-$ - ;
- [0175] $4-$ - $1-$ - $N(3-$ - $)$ - $3-$ - ;
- [0176] $N(3-$ - $)$ - $3-$ - $4-$ - $1-$ - ;
- [0177] $N(3-$ - $)$ - $3-$ - $4-$ - $1-$ - ;
- [0178] $N(3-$ - $)$ - $4-$ - $1-$ - $3-$ - ;
- [0179] $4-$ - $1-$ - $N(3-$ - $)$ - $3-$ - ;
- [0180] $N(3-$ - $)$ - $4-$ - $1-$ - $3-$ - ;
- [0181] $N(3-$ - $)$ - $4(4-$ - $-1-$)- $3-$ - ;
- [0182] $N(3-$ - $)$ - $4-$ - $4-$ - $3-$ - ;
- [0183] $N(3-$ - $)$ - $4-$ - $1-$ - $3-$ - ;
- [0184] $N(3-$ - $)$ - $4-$ - $1-$ - $3-$ - ;
- [0185] $N(3-$ - $)$ - $4-$ - $1-$ - $3-$ - ;
- [0186] $N(3-$ - $)$ - $4-$ - $1-$ - $3-$ - ;
- [0187] $N(3-$ - $)$ - $4-$ - $1-$ - $3-$ - ;
- [0188] $N(3-$ - $)$ - $4-$ - $1-$ - $3-$ - ;
- [0189] $N(3-$ - $)$ - $4-$ - $1-$ - $3-$ - ;
- [0190] $N(3-$ - $)$ - $4-$ - $1-$ - $3-$ - ;

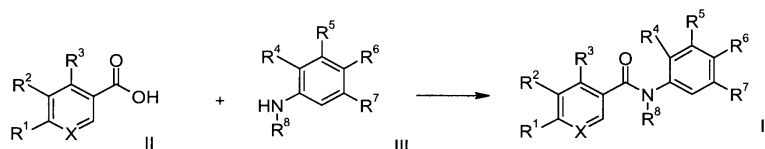
- [0191] 4 -1- -Nm -3 - ;
- [0192] N(3 -)-4 -1- -3 - ;
- [0193] 4 -1- -N[3(1,1,2,2 -)-]-3 - ;
- [0194] (,)-4(3,5 - -1-)-N(3 -)-3 - ;
- [0195] 4 -1- -N(3 -)-3 - ;
- [0196] 4(4 - -1-)-N(3 -)-3 - ;
- [0197] N(3 -)-3 -4(4 - -1-)- ;
- [0198] 4 -3 - -3,4,5,6 -2H[1,2] -5- (3 -)- ;
- [0199] 5 -N(3 -)-6 -1- - ;
- [0200] 3- -3,4,5,6 -2H[1,2] -5- (3 -)- ;
- [0201] 3- -4 -3,4,5,6 -2H[1,2] -5- (3 -)- ;
- [0202] 5 -N(3 -)-6 -1- - .

[0203] I , W0 97/03967 ,
 W0 99/65449 , W0 02/053544 , W0 02/059080 US 2003/0105135 A1

[0204] I 1 .

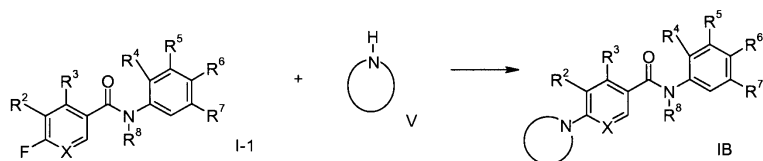
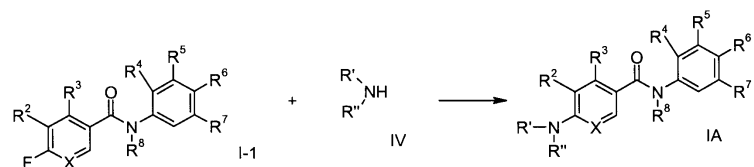
[0205] II

[0206] _____ 1



[0207] III , 3 - N(3 -)-N - II
 (EDC HI) , 5 .
 , 4 -3 , 2

[0209] _____ 2



[0210] 2 F- Q- I-1 .

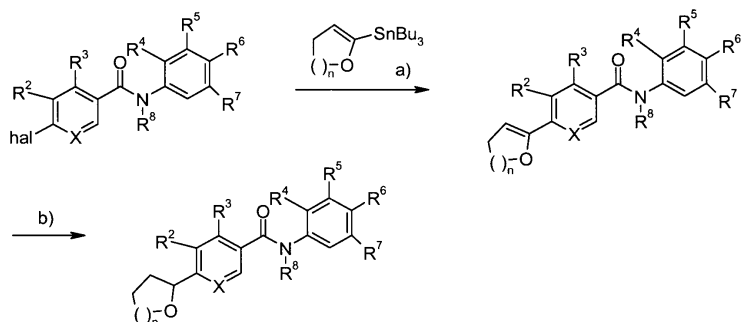
[0212] NN N -2 I-1 IV() V(

) 250 15 IA IB

[0213] IV R R' (CH)_{n-4} -1- (CH)_nC(O)- (CH)_n (CH)_nO

[0214] 2 NH 4 4 3,5 C(O)O 1,1-

[0215] 3



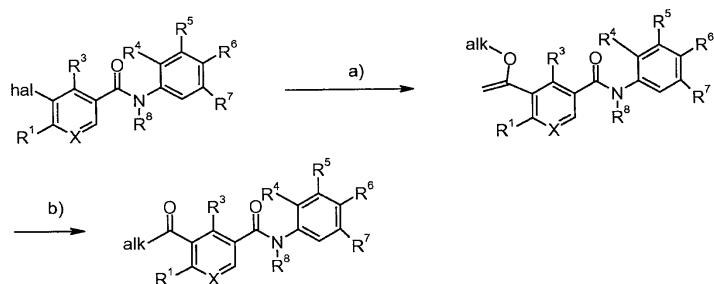
[0216]

[0217] Hal Cl Br, n 1 2

[0218] Pd -()

[0219] a) Pd₂dba₃, P(o-)₃, NEt₃, 24 ; b) H₂, PtO₂, EtOH, 30

[0220] 4



[0221]

[0222] : Jun Mo et al., Tetrahedron 61, 9902 (2005).

[0223] a) H₂C=CHO, Pd(OAc)₂, DPPP, iPr₂NH, DMSO [bnin][BF₄], MW170, 15 ; b) 5% HCl, 30

[0224] Pd

[0225] I

I

[0226]

[0227]

I
(TAAR), TAAR1

[0228]

[0229]

[0230]

TAAR

[0231]

Genomics 85, 372-385] TAAR1 [Lindenmann et al. (2005)
 (Expand High Fidelity PCR System (Roche
 Diagnostics)) 1.5nM Mg²⁺ PCR pCR2.1-TOPO (BD
 (Invitrogen)) PCR pIRESneo2 (BD
 (Clontech))

[0232]

HEK293 (ATCC CRL-1573) (2005)
 HEK293 (Lipofectamine) 2000(
) TAAR () pIRESneo2
 24 1ng/ G418((Sigma)
 EIA 10 cAMP
 (Biotrak Erzyne) (EIA) (Amersham)
 () 15 EC₅₀

[0233]

[0234]

Ca²⁺ Mg²⁺ 10nMEDIA 4
 5 1,000rpm 2
 -80
 10nMEDIA 20 HEPES- NaCH₂ 20nM (pH 7.4) 10 10,000rpm
 (Polytron) (PT 3000, (Kienatica) 4 30
 48,000xg 0.1nMEDIA 20 HEPES- NaCH₂ 20nM (pH 7.4) (A)
 10 10,000rpm 4 30
 48,000xg 20 A 10 10,000rpm
 (Pierce;)
 4 10 48,000xg MgCl₂ (10nM) CaCl₂ (2nM)
 HEPES- NaCH₂ 20nM (pH 7.0) (B) 200g 10 10,000rpm

[0235]

1 4 30 [³H]-
 2- (1, 2, 3, 4) -1-)-2- 60nM K_d
 0.1% 70 80%
 (10μ M [³H]- 2- (1, 2, 3, 4)
 -1-)-2- (10pM 30μ M
 2%
 2 0.3% 2
 (Uni Filter)-96 (Packard Instrument Company)
 GF/C 96 ()
 1 B 3
 (Utina gold; 45 /)

[0241]

I

I

/

[0242]

[0243]

0.01

1,000ng

I

[0244]

()

항목	성분	mg/정제			
		5mg	25mg	100mg	500mg
1	화학식 I의 화합물	5	25	100	500
2	무수 락토스 DTG	125	105	30	150
3	Sta-Rx 1500	6	6	6	30
4	미세결정질 셀룰로스	30	30	30	150
5	마그네슘 스테아레이트	1	1	1	1
	총	167	167	167	831

[0245]

[0246]

[0247]

1. 1, 2, 3, 4

[0248]

2. 50

[0249]

3.

[0250]

4. 5, 3 ;

[0251]

항목	성분	mg/캡슐			
		5mg	25mg	100mg	500mg
1	화학식 I의 화합물	5	25	100	500
2	함수 락토스	159	123	148	---
3	옥수수 전분	25	35	40	70
4	활석	10	15	10	25
5	마그네슘 스테아레이트	1	2	2	5
	총	200	200	300	600

[0252]

[0253]

[0254]

1. 1, 2, 3 30

[0255]

2. 4, 5, 3

[0256]

3.

[0257]

[0258]

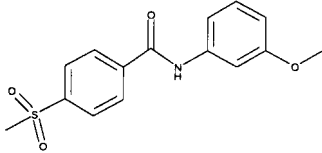
[0259] HPLC = ;

[0260] MS = .

[0261] 80, 81, 82, 83, 117, 198 .

[0262] 1

[0263] 4 -N(3 -)-



[0264]

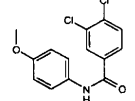
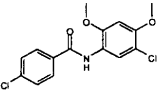
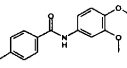
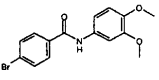
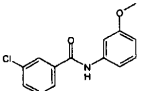
[0265] 92.3mg (83.9%, 0.75nmol) 3- (DMAP) - N- (EDC HCl) 143.8mg (0.75nmol) N(3- (M+H)⁺) 91.6mg (0.75nmol) 4- (M+H)⁺ 100ng (0.5nmol) 4- 5g SCX/ 2.3 18 20 50 4 -N(3 -)- : MS(ISN: 304.4(MH)⁺).

[0266]

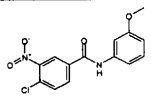
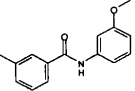
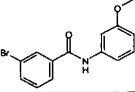
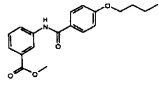
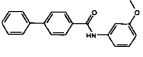
2 83 1 :

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
2		3-(4-클로로-벤젠설포닐메틸)-4-나이트로-벤조산	3-메톡시-아닐린	3-(4-클로로-벤젠설포닐메틸)-N-(3-메톡시-페닐)-4-나이트로-벤즈아미드	460.89	459.1	
3		4-메탄설포닐메틸-벤조산	3-메톡시-아닐린	4-메탄설포닐메틸-N-(3-메톡시-페닐)-벤즈아미드	319.38	318.0	
4		3-메탄설포닐-벤조산	3-메톡시-아닐린	3-메탄설포닐-N-(3-메톡시-페닐)-벤즈아미드	305.35	304.2	
5		3-사이아노-4-플루오로-벤조산	3-메톡시-아닐린	3-사이아노-4-플루오로-N-(3-메톡시-페닐)-벤즈아미드	270.26	269.2	
6		4-클로로-3-트라이플루오로메틸-벤조산	아닐린	4-클로로-N-페닐-3-트라이플루오로메틸-벤즈아미드	299.68		300.1 및 302.2

[0267]

실시 예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
7		3,4-다이 클로로-벤 조산	4- 메톡시- 아닐린	3,4-다이클로로-N-(4- 메톡시-페닐)-벤즈아 미드	296.15		296.0 및 298.0
8		4-클로로- 벤조산	5- 클로로-2, 4-다이 메톡시- 아닐린	4-클로로-N-(5- 클로로-2,4-다이메톡 시-페닐)-벤즈아미드	326.18		326.0 및 328.1
9		4-메틸-벤 조산	3,4-다이 메톡시- 아닐린	N-(3,4-다이메톡시-페 닐)-4-메틸-벤즈아미 드	271.32	270.4	
10		4-브로모- 벤조산	3,4-다이 메톡시- 아닐린	4-브로모-N-(3,4-다이 메톡시-페닐)-벤즈아 미드	336.19	334.1 및 336.1	
11		3-클로로- 벤조산	3- 메톡시- 아닐린	3-클로로-N-(3- 메톡시-페닐)-벤즈아 미드	261.71	260 및 262.1	

[0268]

실시 예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
12		4- 클로로-3- 나이트로- 벤조산	3- 메톡시- 아닐린	4-클로로-N-(3- 메톡시-페닐)-3-나이 트로-벤즈아미드	306.71	305.1	
13		3-메틸-벤 조산	3- 메톡시- 아닐린	N-(3-메톡시-페닐)-3- 메틸-벤즈아미드	241.29	240.3	
14		3-브로모- 벤조산	3- 메톡시- 아닐린	3-브로모-N-(3- 메톡시-페닐)-벤즈아 미드	306.16	304.1 및 306.2	
15		4-부톡시- 벤조산	3- 아미노- 벤조산 메틸 에 스터	3-(4-부톡시-벤조일아 미노)-벤조산 메틸 에 스터	327.38	326.3	
16		바이페닐- 4-카복실 산	3- 메톡시- 아닐린	바이페닐-4-카복실산 (3-메톡시-페닐)-아미 드	303.35	302.2	

[0269]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
17		3,5-다이메톡시-벤조산	3-메톡시-아닐린	3,5-다이메톡시-N-(3-메톡시-페닐)-벤즈아미드	287.31	286.1	
18		3-메틸-벤조산	3-클로로-4-메틸-아닐린	N-(3-클로로-4-메틸-페닐)-3-메틸-벤즈아미드	259.73	257.9 및 260.0	
19		3-메틸-벤조산	3-나이트로-아닐린	3-메틸-N-(3-나이트로-페닐)-벤즈아미드	256.26	255.1	
20		3,4-다이클로로-벤조산	3-메톡시-아닐린	3,4-다이클로로-N-(3-메톡시-페닐)-벤즈아미드	296.15		296.0
21		3,4-다이메톡시-벤조산	4-아미노-벤조산	4-(3,4-다이메톡시-벤조일아미노)-벤조산 2-다이에틸아미노-에틸 에스터	400.48		401.3

[0270]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
22		4-메틸-3-(모폴린-4-설폰일)-벤조산	아닐린	4-메틸-3-(모폴린-4-설폰일)-N-페닐-벤즈아미드	360.43		361.1
23		3-(모폴린-4-설폰일)-벤조산	아닐린	3-(모폴린-4-설폰일)-N-페닐-벤즈아미드	346.4	345.2	
24		4-모폴린-4-일-벤조산	아닐린	4-모폴린-4-일-N-페닐-벤즈아미드	282.34		283.0
25		4-피롤리딘-1-일-벤조산	아닐린	N-페닐-4-피롤리딘-1-일-벤즈아미드	266.34		267.0
26		4-피라졸-1-일-벤조산	아닐린	N-페닐-4-피라졸-1-일-벤즈아미드	263.3		263.9

[0271]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
27		4-(4-메틸-피페리딘-1-일)-3-나이트로-벤조산	3-메톡시-아닐린	N-(3-메톡시-페닐)-4-(4-메틸-피페리딘-1-일)-3-나이트로-벤즈아미드	369.419		370.1
28		4-[3-(4-메틸-피페리딘-1-일)-프로필아미노]-3-나이트로-벤조산	3-메톡시-아닐린	N-(3-메톡시-페닐)-4-[3-(4-메틸-피페리딘-1-일)-프로필아미노]-3-나이트로-벤즈아미드	426.52		427.3
29		2-플루오로-벤조산	3,4-다이클로로-페닐아민	N-(3,4-다이클로로-페닐)-2-플루오로-벤즈아미드	284.12	282.0 및 283.1	
30		3-트라이플루오로메틸-벤조산	4-아미노-2-메톡시-벤조산 메틸 에스터	2-메톡시-4-(3-트라이플루오로메틸-벤조일아미노)-벤조산 메틸 에스터	353.30	352.1	
31		3,4-다이클로로-벤조산	4-아미노-2-메톡시-벤조산 메틸 에스터	4-(3,4-다이클로로-벤조일아미노)-2-메톡시-벤조산 메틸 에스터	354.19	352.0 및 354.1	

[0272]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
32		3-나이트로-4-피라졸-1-일-벤조산	3-메톡시-아닐린	N-(3-메톡시-페닐)-3-나이트로-4-피라졸-1-일-벤즈아미드	338.33	337.2	
33		4-(2,2,2-트라이플루오로-아세틸)-벤조산	2,4-다이클로로-5-메톡시-페닐아민	N-(2,4-다이클로로-5-메톡시-페닐)-4-(2,2,2-트라이플루오로-아세틸)-벤즈아미드	392.16		392.1 및 394.2
34		3-메톡시-벤조산	4-아미노-벤조산 2-다이에틸아미노-에틸 에스터	4-(3-메톡시-벤조일아미노)-벤조산 2-다이에틸아미노-에틸 에스터	370.45		371.1
35		6-모폴린-4-일-니코틴산	4-클로로-페닐아민	N-(4-클로로-페닐)-6-모폴린-4-일-니코틴아미드	317.77		318.2
36		3-프로피온일옥시-벤조산	3-메톡시-아닐린	프로피온산 3-(3-메톡시-페닐카바모일)-페닐 에스터	299.33		300.1

[0273]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(1SN): (M-H) ⁻	MS(1SP): (M+H) ⁺
37		3-나이트로-벤조산	3-메톡시-4-옥사졸-5-일-페닐아민	N-(3-메톡시-4-옥사졸-5-일-페닐)-3-나이트로-벤즈아미드	339.31		340.0
38		3-메톡시-벤조산	3-메톡시-4-옥사졸-5-일-페닐아민	3-메톡시-N-(3-메톡시-4-옥사졸-5-일-페닐)-벤즈아미드	324.34		325.3
39		3-메틸-벤조산	3-메톡시-4-옥사졸-5-일-페닐아민	N-(3-메톡시-4-옥사졸-5-일-페닐)-3-메틸-벤즈아미드	308.34		309.3
40		3-다이메틸설팜아일옥시-벤조산	3-클로로-페닐아민	다이메틸-설팜산 3-(3-클로로-페닐카바모일)-페닐 에스터	354.82		355.0 및 357.1
41		3-플루오로-벤조산	(3-클로로-페닐)-메틸아민	N-(3-클로로-페닐)-3-플루오로-N-메틸-벤즈아미드	263.70		263.8 및 265.9

[0274]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(1SN): (M-H) ⁻	MS(1SP): (M+H) ⁺
42		4-브로모-3-나이트로-벤조산	3-메톡시-아닐린	4-브로모-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	351.16	349.0 및 351.1	
43		4-클로로-3-메톡시-5-나이트로-벤조산	3-메톡시-아닐린	4-클로로-3-메톡시-N-(3-메톡시-페닐)-5-나이트로-벤즈아미드	336.73	335.2 및 337.1	
44		6-피라졸-1-일-니코틴산		N-(3-클로로-페닐)-6-이미다졸-1-일-니코틴아미드	298.73		299.0
45		6-모폴린-4-일-니코틴산	3-클로로-페닐아민	N-(3-클로로-페닐)-6-모폴린-4-일-니코틴아미드	317.77		318.8 및 320.9
46		4-(5-카복시-피리딘-2-일)-피페라진-1-카복실산 tert-부틸 에스터	3-클로로-페닐아민	4-[5-(3-클로로-페닐카바모일)-피리딘-2-일]-피페라진-1-카복실산 tert-부틸 에스터	416.91	415.2	

[0275]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
47		5,6-다이클로로-니코틴산	3-클로로-페닐아민	5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	301.56		301.0 및 302.9 및 305.0
48		6-플루오로-니코틴산	3-클로로-페닐아민	N-(3-클로로-페닐)-6-플루오로-니코틴아미드	250.66	249.0 및 251.1	
49		6-플루오로-니코틴산	3-메톡시-아닐린	6-플루오로-N-(3-메톡시-페닐)-니코틴아미드	246.24		247.2
50		6-플루오로-니코틴산	3,4-다이클로로-페닐아민	N-(3,4-다이클로로-페닐)-6-플루오로-니코틴아미드	285.10	282.9 및 284.0	
51		3-메틸-벤조산	4-클로로-3-메톡시-페닐아민	N-(4-클로로-3-메톡시-페닐)-3-메틸-벤즈아미드	275.73		276.0 및 278.1

[0276]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
52		3-메틸-벤조산	3-아미노-벤조나이트릴	N-(3-사이아노-페닐)-3-메틸-벤즈아미드	236.27		237.0
53		3-사이아노-4-플루오로-벤조산	3-클로로-페닐아민	N-(3-클로로-페닐)-3-사이아노-4-플루오로-벤즈아미드	274.68	273.1 및 275.2	
54		4-사이아노메탄설폰일메틸-벤조산	3-메톡시-아닐린	4-사이아노메탄설폰일메틸-N-(3-메톡시-페닐)-벤즈아미드	344.39	343.0	
55		4-클로로-3-트라이플루오로메틸-벤조산	3,4-다이클로로-페닐아민	4-클로로-N-(3,4-다이클로로-페닐)-3-트라이플루오로메틸-벤즈아미드	368.57	365.9 및 367.9 및 371.0	
56		4-나이트로-3-트라이플루오로메틸-벤조산	3,4-다이클로로-페닐아민	N-(3,4-다이클로로-페닐)-4-나이트로-3-트라이플루오로메틸-벤즈아미드	379.12	377.0 및 379.0 및 381.0	

[0277]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
57		4-사이클로헥실-벤조산	3,4-다이클로로-페닐아민	4-사이클로헥실-N-(3,4-다이클로로-페닐)-벤즈아미드	348.27	345.9 및 348.0 및 350.1	
58		4-에틸아미노-벤조산	3-메톡시-아닐린	4-에틸아미노-N-(3-메톡시-페닐)-벤즈아미드	270.33	269.1	
59		4-피페리딘-1-일-벤조산	3-메톡시-아닐린	N-(3-메톡시-페닐)-4-피페리딘-1-일-벤즈아미드	310.40	309.3	
60		4-(1,1-다이옥소이소티아졸리딘-2-일)-벤조산	3-메톡시-아닐린	4-(1,1-다이옥소-1,1,6-이소티아졸리딘-2-일)-N-(3-메톡시-페닐)-벤즈아미드	346.40	345.0	
61		3-(4-브로모-페닐설폰아미드)-벤조산	3-메톡시-아닐린	3-(4-브로모-페닐설폰아미드)-N-(3-메톡시-페닐)-벤즈아미드	461.34	459.0 및 460.9	

[0278]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
62		4-메틸아미노-벤조산	3-메톡시-아닐린	N-(3-메톡시-페닐)-4-메틸아미노-벤즈아미드	256.30		257.1
63		4-다이메틸아미노-벤조산	3-메톡시-아닐린	4-다이메틸아미노-N-(3-메톡시-페닐)-벤즈아미드	270.33		271.1
64		4-다이에틸아미노-벤조산	3-메톡시-아닐린	4-다이에틸아미노-N-(3-메톡시-페닐)-벤즈아미드	298.39		299.1
65		4-메틸-3-(모폴린-4-설폰일)-벤조산	3-메톡시-아닐린	N-(3-메톡시-페닐)-4-메틸-3-(모폴린-4-설폰일)-벤즈아미드	390.46		391.0
66		4-피롤리딘-1-일-벤조산	3-메톡시-아닐린	N-(3-메톡시-페닐)-4-피롤리딘-1-일-벤즈아미드	296.37	295.4	

[0279]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
67		4-피라졸-1-일-벤조산	3-메톡시-아닐린	N-(3-메톡시-페닐)-4-피라졸-1-일-벤즈아미드	293.33	292.1	
68		4-클로로-3-메탄설폰일-벤조산	3-메톡시-아닐린	4-클로로-3-메탄설폰일-N-(3-메톡시-페닐)-벤즈아미드	339.80	338.0 및 340.1	340.0 및 342.1
69		3,4-다이플루오로-벤조산	3-메톡시-아닐린	3,4-다이플루오로-N-(3-메톡시-페닐)-벤즈아미드	263.24		263.8
70		3-클로로-4-플루오로-벤조산	3-메톡시-아닐린	3-클로로-4-플루오로-N-(3-메톡시-페닐)-벤즈아미드	279.70	278.1 및 280.1	
71		3-브로모-4-플루오로-벤조산	3-메톡시-아닐린	3-브로모-4-플루오로-N-(3-메톡시-페닐)-벤즈아미드	324.15	322.0 및 324.1	

[0280]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
72		4-플루오로-3-메틸-벤조산	3-메톡시-아닐린	4-플루오로-N-(3-메톡시-페닐)-3-메틸-벤즈아미드	259.28	258.0	
73		4-플루오로-3-트라이플루오로메틸-벤조산	3-메톡시-아닐린	4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	313.25	312.0	
74		4,5-다이플루오로-2-메톡시-벤조산	3-메톡시-아닐린	4,5-다이플루오로-2-메톡시-N-(3-메톡시-페닐)-벤즈아미드	293.27	292.1	
75		3-사이아노-벤조산	3-메톡시-아닐린	3-사이아노-N-(3-메톡시-페닐)-벤즈아미드	252.27	251.2	
76		3-(모폴린-4-설폰일)-벤조산	3-클로로-페닐아민	N-(3-클로로-페닐)-3-(모폴린-4-설폰일)-벤즈아미드	380.85	379.0 및 381.1	

[0281]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
77		4-플루오로-3-트라이플루오로메틸벤조산	3-메톡시-아닐린	4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸벤즈아미드	329.25	328.0	
78		5,6-다이클로로-니코틴산	3-메톡시-아닐린	5,6-다이클로로-N-(3-메톡시-페닐)-니코틴아미드	297.14	295.0 및 297.1	
79		4-플루오로-3-트라이플루오로메틸벤조산	4-클로로-3-메톡시-페닐아민	N-(4-클로로-3-메톡시-페닐)-4-플루오로-3-트라이플루오로메틸벤즈아미드	347.69	346.1 및 348.2	
80		5,6-다이클로로-니코틴산	피리딘-2-일아민	5,6-다이클로로-N-피리딘-2-일-니코틴아미드	268.10	265.9 및 268.0	
81		4-플루오로-3-트라이플루오로메틸벤조산	피리미딘-4-일아민	4-플루오로-N-피리미딘-4-일-3-트라이플루오로메틸벤즈아미드	285.20	284.0	

[0282]

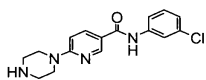
실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
82		4-플루오로-3-트라이플루오로메틸벤조산	2-클로로-피리딘-4-일아민	N-(2-클로로-피리딘-4-일)-4-플루오로-3-트라이플루오로메틸벤즈아미드	318.66	317.0 및 319.1	
83		4-플루오로-3-트라이플루오로메틸벤조산	2-메톡시-피리딘-4-일아민	4-플루오로-N-(2-메톡시-피리딘-4-일)-3-트라이플루오로메틸벤즈아미드	314.24	313.20	

[0283]

[0284]

[0285]

84
N(3- -)-6 -1- -



[0286]

[0287]

1 1N HCl 0.5 30mg(0.072mmol) 4-[5-(3- -)- -2]- -
 1- tert- (46) , 20
 , , 1N NaCH , tert- 3
 , Na₂SO₄ , , N(3- -)-6 -1- -
 : MS(EI): 316.1 318.1(M⁺).

[0288]

[0289]

85
4 -N(3- -)-3 -

 9. 26g(75mmol) 3- - 150 14. 38g(75mmol) N(3- -)-N-
 (EDC HCl) , 5
 9. 26g(50mmol) 4- -3- , 4

[0290]

[0291]

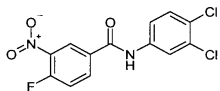
, 150 2N HCl , , 50
 . 2 50 , Na₂SO₄ ,

11.11g 4 -N(3 -)-3 -

: 145-146 ; MS(ISN): 289.0((MH⁻)).

[0292] **86**

[0293] N(3,4 -)-4 -3 -

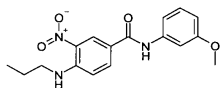


[0294]

[0295] N(3,4 -)-4 -3 - 3,4 4 -3
 - 85 : MS(ISN): 327.1, 329.1 331.1((MH⁻)).

[0296] **87**

[0297] N(3 -)-3 -4 -



[0298]

[0299] 2 35.5ng(1.1nmol) 145ng(0.5nmol) 4 -N(3 -)-3
 - 70 . 3g SCX/ 1:1
 , 20 10 - , 20
 . N(3 -)-3 -4 -
 : MS(ISP): 330.1((MH⁺)).

[0300]

88

96

87

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실시예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISP): (M+H) ⁺
88		4-플루오로-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	벤질아민	4-벤질아미노-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	377.40	378.1
89		4-플루오로-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	메틸아민	N-(3-메톡시-페닐)-4-메틸아미노-3-나이트로-벤즈아미드	301.30	302.0
90		4-플루오로-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	에틸아민	4-에틸아미노-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	315.33	316.0
91		4-플루오로-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	이소프로필아민	4-이소프로필아미노-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	329.35	330.2
92		4-플루오로-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	아제티딘	4-아제티딘-1-일-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	327.34	328.0

[0301]

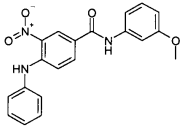
실시예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISP): (M+H) ⁺
93		4-플루오로-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	피롤리딘	N-(3-메톡시-페닐)-3-나이트로-4-피롤리딘-1-일-벤즈아미드	341.37	342.1
94		4-플루오로-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	피페리딘	N-(3-메톡시-페닐)-3-나이트로-4-피페리딘-1-일-벤즈아미드	355.39	356.2
95		4-플루오로-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	모폴린	N-(3-메톡시-페닐)-4-모폴린-4-일-3-나이트로-벤즈아미드	357.36	358.0
96		4-플루오로-N-(3-메톡시-페닐)-3-나이트로-벤즈아미드	1-메틸피페라진	N-(3-메톡시-페닐)-4-(4-메틸-피페라진-1-일)-3-나이트로-벤즈아미드	370.41	371.1

[0302]

[0303]

97

[0304] N(3- -)-3 -4 -

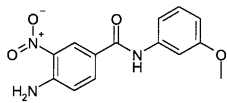


[0305]

[0306] 2 102.4ng(1.1nmol) 145ng(0.5nmol) 4 -N(3- -)-3
 - 50 70 . 4g SCX/ 1:1
 , 20 10 - , 20
 . N(3- -)-3 -4 -
 : MS(ISP): 364.0((MH)⁺).

[0307] 98

[0308] 4 -N(3- -)-3 -



[0309]

[0310] 5 25% 2 NN 145ng(0.5nmol) 4 -N(3- -)-3
)-3 - : 2.5
 , 50 tert- , tert- 2
 . , Na₂SO₄ , , 4 -
 N(3- -)-3 - : MS(ISP): 287.9((MH)⁺).

[0311] N

[0312] 99 124

[0313] : 1 1 (2(1H7- -1-)-1, 1, 3 3 -
 (HATU) NN , 30 , 1 N -
 . NN 1 ,
 18 . 50 20 ,
 HPLC

[0314]

실시 예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (MH) ⁺
99		4-모폴린-4-일-3-나이트로-벤조산	4-플루오로-페닐아민	N-(4-플루오로-페닐)-4-모폴린-4-일-3-나이트로-벤즈아미드	345.33	344.2	
100		4-모폴린-4-일-3-나이트로-벤조산	p-톨릴아민	4-모폴린-4-일-3-나이트로-N-p-톨릴-벤즈아미드	341.37		342.2
101		4-모폴린-4-일-3-나이트로-벤조산	4-트라이플루오로메톡시-페닐아민	4-모폴린-4-일-3-나이트로-N-(4-트라이플루오로메톡시-페닐)-벤즈아미드	411.34	410.2	
102		4-모폴린-4-일-3-나이트로-벤조산	4-아미노-벤조나이트릴	N-(4-사이아노-페닐)-4-모폴린-4-일-3-나이트로-벤즈아미드	352.35	351.2	

실시예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISN) : (M-H) ⁻	MS(ISP) : (M+H) ⁺
103		4-모폴린-4-일-3-니트로-벤조산	3-아미노-벤조나이트릴	N-(3-사이아노-페닐)-4-모폴린-4-일-3-니트로-벤즈아미드	352.35	351.2	
104		4-모폴린-4-일-3-니트로-벤조산	3,5-다이클로로-페닐아민	N-(3,5-다이클로로-페닐)-4-모폴린-4-일-3-니트로-벤즈아미드	396.23	394.1 및 396.2	
105		4-모폴린-4-일-3-니트로-벤조산	4-클로로-페닐아민	N-(4-클로로-페닐)-4-모폴린-4-일-3-니트로-벤즈아미드	361.78	360.2	
106		4-모폴린-4-일-3-니트로-벤조산	4-브로모-페닐아민	N-(4-브로모-페닐)-4-모폴린-4-일-3-니트로-벤즈아미드	406.24	404.1 및 406.1	

[0315]

실시예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISN) : (M-H) ⁻	MS(ISP) : (M+H) ⁺
107		4-모폴린-4-일-3-니트로-벤조산	4-메톡시-페닐아민	N-(4-메톡시-페닐)-4-모폴린-4-일-3-니트로-벤즈아미드	357.37		358.2
108		4-모폴린-4-일-3-니트로-벤조산	바이페닐-4-일아민	N-바이페닐-4-일-4-모폴린-4-일-3-니트로-벤즈아미드	403.44	402.2	
109		4-모폴린-4-일-3-니트로-벤조산	3-클로로-페닐아민	N-(3-클로로-페닐)-4-모폴린-4-일-3-니트로-벤즈아미드	361.78	360.2	
110		4-모폴린-4-일-3-니트로-벤조산	3-플루오로-페닐아민	N-(3-플루오로-페닐)-4-모폴린-4-일-3-니트로-벤즈아미드	345.33	344.2	

[0316]

실시예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
111		4-모폴린-4-일-3-나이트로-벤조산	3-트라이플루오로메톡시-페닐아민	4-모폴린-4-일-3-나이트로-N-(3-트라이플루오로메톡시-페닐)-벤즈아미드	411.34	410.2	
112		4-모폴린-4-일-3-나이트로-벤조산	3-트라이메틸-페닐아민	4-모폴린-4-일-3-나이트로-N-(3-트라이메틸-페닐)-벤즈아미드	395.34	394.2	
113		4-모폴린-4-일-3-나이트로-벤조산	바이페닐-3-일아민	N-바이페닐-3-일-4-모폴린-4-일-3-나이트로-벤즈아미드	403.44		404.3
114		4-모폴린-4-일-3-나이트로-벤조산	3-메탄설폰일-페닐아민	N-(3-메탄설폰일-페닐)-4-모폴린-4-일-3-나이트로-벤즈아미드	405.43	404.2	

[0317]

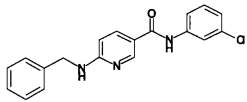
실시예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
115		4-모폴린-4-일-3-나이트로-벤조산	N-(3-아미노-페닐)-아세트아미드	N-(3-아세틸아미노-페닐)-4-모폴린-4-일-3-나이트로-벤즈아미드	384.39		385.2
116		4-모폴린-4-일-3-나이트로-벤조산	4-클로로-3-메톡시-페닐아민	N-(4-클로로-3-메톡시-페닐)-4-모폴린-4-일-3-나이트로-벤즈아미드	391.81	390.2	
117		4-모폴린-4-일-3-나이트로-벤조산	4-메틸-피리딘-2-일아민	N-(4-메틸-피리딘-2-일)-4-모폴린-4-일-3-나이트로-벤즈아미드	342.35		343.2
118		4-모폴린-4-일-3-나이트로-벤조산	나프탈렌-2-일아민	4-모폴린-4-일-N-나프탈렌-2-일-3-나이트로-벤즈아미드	377.40	376.3	

[0318]

실시예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
119		6-모폴린-4-일-니코틴산	p-톨릴아민	6-모폴린-4-일-N-p-톨릴-니코틴아미드	297.36		298.2
120		6-모폴린-4-일-니코틴산	4-트라이플루오로메톡시-페닐아민	6-모폴린-4-일-N-(4-트라이플루오로메톡시-페닐)-니코틴아미드	367.33		368.2
121		6-모폴린-4-일-니코틴산	3-플루오로-페닐아민	N-(3-플루오로-페닐)-6-모폴린-4-일-니코틴아미드	301.32	300.2	
122		6-모폴린-4-일-니코틴산	3-트라이플루오로메톡시-페닐아민	6-모폴린-4-일-N-(3-트라이플루오로메톡시-페닐)-니코틴아미드	367.33	366.2	
실시예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
123		6-모폴린-4-일-니코틴산	나프탈렌-2-일아민	6-모폴린-4-일-N-나프탈렌-2-일-니코틴아미드	333.39		334.2
124		6-모폴린-4-일-니코틴산	3,5-다이클로로-페닐아민	N-(3,5-다이클로로-페닐)-6-모폴린-4-일-니코틴아미드	352.22		352.1 및 354.1

125

6-N(3-)-



1 NN 80ng(0.32nmol) N(3-)-6- (48)
 51ng(0.48nmol) 20
 / 1:1
 6-N(3-)- : MS(ISP): 337.9
 340.0(MH⁺).

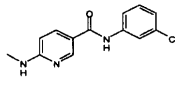
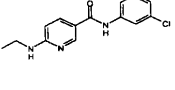
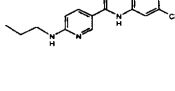
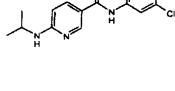
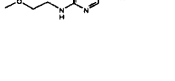
[0324]

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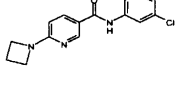
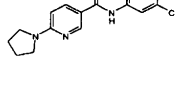
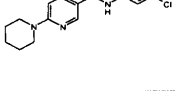
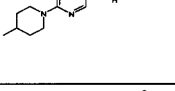

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실시 예	구조	4- 플루오로- 니코틴- 또는 벤즈-아 미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
126		N-(3-클로 로- 페닐)-6-플 루오로-니 코틴아미드	메틸아민	N-(3-클로로- 페닐)-6-메틸아미노- 니코틴아미드	261.71		261.9 및 264.0
127		N-(3-클로 로- 페닐)-6-플 루오로-니 코틴아미드	에틸아민	N-(3-클로로- 페닐)-6-에틸아미노- 니코틴아미드	275.54		276.0 및 278.1
128		N-(3-클로 로- 페닐)-6-플 루오로-니 코틴아미드	프로필아 민	N-(3-클로로- 페닐)-6-프로필아미 노-니코틴아미드	289.76		290.0 및 292.1
129		N-(3-클로 로- 페닐)-6-플 루오로-니 코틴아미드	이소프로 필아민	N-(3-클로로- 페닐)-6-이소프로필 아미노-니코틴아미드	289.76		290.0 및 292.1
130		N-(3-클로 로- 페닐)-6-플 루오로-니 코틴아미드	2- 메톡시- 에틸아민	N-(3-클로로- 페닐)-6-(2-메톡시- 에틸아미노)-니코틴 아미드	305.76		306.1 및 308.1

[0325]

실시 예	구조	4- 플루오로- 니코틴- 또는 벤즈-아 미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
131		N-(3-클로 로- 페닐)-6-플 루오로-니 코틴아미드	아제티딘	6-아제티딘-1- 일-N-(3-클로로- 페닐)-니코틴아미드	287.75		287.9 및 290.0
132		N-(3-클로 로- 페닐)-6-플 루오로-니 코틴아미드	피롤리딘	N-(3-클로로- 페닐)-6-피롤리딘-1- 일-니코틴아미드	301.78		302.0 및 304.1
133		N-(3-클로 로- 페닐)-6-플 루오로-니 코틴아미드	피페리딘	3,4,5,6-테트라하이 드로-2H-[1,2']바이 피리딘일-5'-카복실 산 (3-클로로-페닐)- 아미드	315.80		316.0 및 318.1
134		N-(3-클로 로- 페닐)-6-플 루오로-니 코틴아미드	4-메틸- 피페리딘	4-메틸-3,4,5,6-테트 라하이드로-2H-[1,2']바이피리딘일-5'-카 복실산 (3-클로로-페 닐)-아미드	329.83	328.1 및 330.1	
135		N-(3-클로 로- 페닐)-6-플 루오로-니 코틴아미드	1-메틸- 피페라진	N-(3-클로로- 페닐)-6-(4-메틸-피 페라진-1-일)-니코틴 아미드	330.82		331.1 및 333.2

[0326]

실시예	구조	4-플루오로-니코틴- 또는 벤즈-아미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
136		N-(3-클로로-페닐)-6-플루오로-니코틴아미드	부틸아민	6-부틸아미노-N-(3-클로로-페닐)-니코틴아미드	303.79		304.0 및 306.1
137		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	피롤리딘	N-(3-메톡시-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	364.37		365.0
138		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	메틸아민	N-(3-메톡시-페닐)-4-메틸아미노-3-트라이플루오로메틸-벤즈아미드	324.30		325.3
139		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	2-메톡시-에틸아민	4-(2-메톡시-에틸아미노)-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	368.35		369.1
140		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	아제티딘	4-아제티딘-1-일-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	350.34		351.1

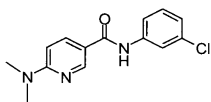
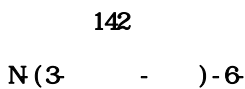
[0327]

실시예	구조	4-플루오로-니코틴- 또는 벤즈-아미드	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
141		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	피페리딘	N-(3-메톡시-페닐)-4-피페리딘-1-일-3-트라이플루오로메틸-벤즈아미드	378.39		379.2

[0328]

[0329]

[0330]



[0331]

[0332]

1 NN 80ng(0.32nmol) N(3- -)-6- - (48)
200 45
/ 1:1
(3- -)-6- - : MS(ISP): 276.0 N

278.1 ((MH)⁺).

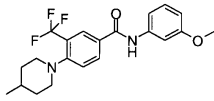
[0333]

143

[0334]

N-(3- -)-4-(4- - -1-)-3- -

[0335]



[0336]

1 1- -2- 100ng(0.32nmol) 4- -N-(3- -)-3- -
 (73) 57ng(0.97 nmol) 250 15 .
 , , 10% 20% /
 . N-(3- -)-4-(4-
 - -1-)-3- - : MS(ISP): 392.9((MH)⁺).

[0337]

144 165 143 :

실시 예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	반응 온도 (°C)	반응 시간 (분)	MS(ISP): (M-H) ⁻	MS(ISP): (M+H) ⁺
144		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	프로필아민	N-(3-메톡시-페닐)-4-프로필아미노-3-트라이플루오로메틸-벤즈아미드	200	15		353.1
145		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	부틸아민	4-부틸아미노-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	200	15		367.0
146		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	1-메틸-피페라진	N-(3-메톡시-페닐)-4-(4-메틸-피페라진-1-일)-3-트라이플루오로메틸-벤즈아미드	200	15		394.0
147		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	벤질아민	4-벤질아미노-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	250	15		401.2

[0338]

실시예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	반응 온도 (°C)	반응 시간 (분)	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
148		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	에틸아민	4-에틸아미노-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	250	15	337.1	
149		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	이소프로필아민	4-이소프로필아미노-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	250	15	351.3	
150		4-플루오로-N-(3-메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	모폴린	N-(3-메톡시-페닐)-4-모폴린-4-일-3-트라이플루오로메틸-벤즈아미드	250	15		381.2
151		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	메틸아민	5-클로로-N-(3-클로로-페닐)-6-메틸아미노-니코틴아미드	120	15	294.0 및 296.1	

[0339]

실시예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	반응 온도 (°C)	반응 시간 (분)	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
152		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	이소프로필아민	5-클로로-N-(3-클로로-페닐)-6-이소프로필아미노-니코틴아미드	120	15		324.1 및 326.0
153		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	2-메톡시-에틸아민	5-클로로-N-(3-클로로-페닐)-6-(2-메톡시-에틸아미노)-니코틴아미드	120	15		339.9 및 342.0 및 344.1
154		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	피롤리딘	5-클로로-N-(3-클로로-페닐)-6-피롤리딘-1-일-니코틴아미드	120	15		336.0 및 338.0 및 340.0
155		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	4-메틸-피페리딘	3'-클로로-4-메틸-3,4,5,6-테트라하이드로-2H-[1,2']바이피리딘-일-5'-카복실산(3-클로로-페닐)-아미드	250	15		363.9 및 366.0

[0340]

실시 예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	반응 온도 (°C)	반응 시간 (분)	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
156		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	에틸아민	5-클로로-N-(3-클로로-페닐)-6-에틸아미노-니코틴아미드	120	15		309.9 및 312.0
157		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	프로필아민	5-클로로-N-(3-클로로-페닐)-6-프로필아미노-니코틴아미드	120	15		324.0 및 326.1
158		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	부틸아민	6-부틸아미노-5-클로로-N-(3-클로로-페닐)-니코틴아미드	120	15		337.9 및 339.9
159		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	다이메틸아민	5-클로로-N-(3-클로로-페닐)-6-다이메틸아미노-니코틴아미드	120	15		309.9 및 312.0

[0341]

실시 예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	반응 온도 (°C)	반응 시간 (분)	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
160		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	모폴린	5-클로로-N-(3-클로로-페닐)-6-모폴린-4-일-니코틴아미드	120	15		352.0 및 354.1
161		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	벤질아민	6-벤질아미노-5-클로로-N-(3-클로로-페닐)-니코틴아미드	120	15	370.0 및 372.0	
162		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	아제티딘	6-아제티딘-1-일-5-클로로-N-(3-클로로-페닐)-니코틴아미드	120	15		322.1 및 324.1
163		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	피페리딘	3'-클로로-3,4,5,6-테트라하이드로-2H-[1,2']바이피리딘일-5'-카복실산(3-클로로-페닐)-아미드	180	15		350.1 및 352.1

[0342]

실시 예	구조	4-플루오로-벤즈아미드	R'NHR"	생성물의 화학 명칭	반응 온도 (°C)	반응 시간 (분)	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
164		5,6-다이클로로-N-(3-클로로-페닐)-니코틴아미드	1-메틸-피페라진	5-클로로-N-(3-클로로-페닐)-6-(4-메틸-피페라진-1-일)-니코틴아미드	120	15		364.9 및 367.0
165		N-(4-클로로-3-메톡시-페닐)-4-플루오로-3-트라이플루오로메틸-벤즈아미드	피롤리딘	N-(4-클로로-3-메톡시-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	150	15		399.0 및 401.1

[0343]

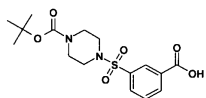
[0344]

[0345]

166

N(3 -)-3(-1 -)-

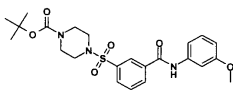
[0346] (a) 4-(3-(tert-butylamino)phenyl)acetic acid



[0347]

[0348] 745ng(4nmol) -1- tert- 304ng(3nmol) 1
 220ng(1nmol) 3- , 60 .
 , 2N NaOH , .
 pH 1 , 3 , Na₂SO₄
 , 4-(3-(tert-butylamino)phenyl)acetic acid
 : MS(ES): 368.8((MH)⁻).

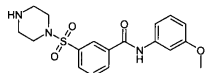
[0349] (b) 4-[3-(3-(tert-butylamino)phenyl)amino]benzoic acid



[0350]

[0351] 4-[3-(3-(tert-butylamino)phenyl)amino]benzoic acid -1- tert- 4-(3-(tert-butylamino)phenyl)acetic acid
 , MS(ES): 476.0((MH)⁺), 420.1(((MH)-tBu)⁺) 98%, 376.3(((MH)-Boc)⁺) 100%.

[0352] (c) N-(3-(tert-butylamino)phenyl)acetamide



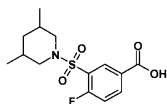
[0353]

[0354] 10 2N HCl 110ng(0.23nmol) 4-[3-(3-(tert-butylamino)phenyl)amino]benzoic acid -1- tert- 50 30 , 2N NaOH , Na₂SO₄ ,
 / 9:1
 . N-(3-(tert-butylamino)phenyl)acetamide : MS(ES):
 376.3((MH)⁺).

[0355] 167

[0356] (,)-3-(3,5-(tert-butylamino)-4-(tert-butylamino)phenyl)-N-(3-(tert-butylamino)phenyl)acetamide

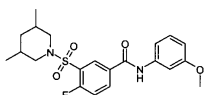
[0357] (a) (,)-3-(3,5-(tert-butylamino)-4-(tert-butylamino)phenyl)-N-(3-(tert-butylamino)phenyl)acetamide



[0358]

[0359] (,)-3-(3,5-(tert-butylamino)-4-(tert-butylamino)phenyl)-N-(3-(tert-butylamino)phenyl)acetamide -3- -4- -
 (,)-3,5- 166 (a) :
 MS(ES): 314.1((MH)⁻).

[0360] (b) (,)-3-(3,5-(tert-butylamino)-4-(tert-butylamino)phenyl)-N-(3-(tert-butylamino)phenyl)acetamide



[0361]

[0362] (,)-3-(3,5-(tert-butylamino)-4-(tert-butylamino)phenyl)-N-(3-(tert-butylamino)phenyl)acetamide (,)
)-3-(3,5-(tert-butylamino)-4-(tert-butylamino)phenyl)-N-(3-(tert-butylamino)phenyl)acetamide 1

: , MS(ISP): 421.0(MH⁺).

[0363]

168

176

167

:

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
168		4-플루오로-3-(피페리딘-1-설푼일)-벤조산	3-메톡시-아닐린	4-플루오로-N-(3-메톡시-페닐)-3-(피페리딘-1-설푼일)-벤즈아미드	392.45		393.0
169		3-(아세트리딘-1-설푼일)-벤조산	3-메톡시-아닐린	3-(아세트리딘-1-설푼일)-N-(3-메톡시-페닐)-벤즈아미드	346.41		347.1
170		3-(아제판-1-설푼일)-벤조산	3-메톡시-아닐린	3-(아제판-1-설푼일)-N-(3-메톡시-페닐)-벤즈아미드	388.49		389.1
171		(라세미, 메조)-3-(3,5-다이메틸-피페리딘-1-설푼일)-벤조산	3-메톡시-아닐린	3-(3,5-다이메틸-피페리딘-1-설푼일)-N-(3-메톡시-페닐)-벤즈아미드	402.51		403.2
172		3-다이메틸설파모일-벤조산	3-메톡시-아닐린	3-다이메틸설파모일-N-(3-메톡시-페닐)-벤즈아미드	334.39		335.0

[0364]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISN): (M-H) ⁻	MS(ISP): (M+H) ⁺
173		3-메틸설파모일-1-벤조산	3-메톡시-아닐린	N-(3-메톡시-페닐)-3-메틸설파모일-벤즈아미드	320.37		321.0
174		3-(피롤리딘-1-설푼일)-벤조산	3-메톡시-아닐린	N-(3-메톡시-페닐)-3-(피롤리딘-1-설푼일)-벤즈아미드	360.43		361.1
175		3-(피페리딘-1-설푼일)-벤조산	3-메톡시-아닐린	N-(3-메톡시-페닐)-3-(피페리딘-1-설푼일)-벤즈아미드	374.46		375.3
176		4-플루오로-3-설파모일-벤조산	3-메톡시-아닐린	4-플루오로-N-(3-메톡시-페닐)-3-설파모일-벤즈아미드	324.33	323.3	

[0365]

177

[0366]

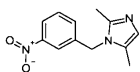
[0367]

3,4 -N[3(2,5- - -1-)-]-

[0368]

(a) 2,5- -1-(3- -)-1H

[0369]

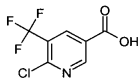


[0370]

2 300ng(1.39nmol) 3 192ng(1.39nmol) 1-(2,4-
-1-)- 160 15
2MNaCH , 15
3 , Na₂SO₄
5% 10% /
- 2,5- -1-(3- -)-1H

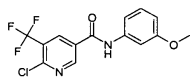
[0387] 30 9.60g(29mmol) 6-5- -2,3-
 0 , 5 29.5 2N NaOH , 30
 , 2N HCl ,
 3 , Na₂SO₄ ,
 6-5- -2,3- , MS(ISN):
 268.3 270.4((MH⁺)).

[0388] (d) 6-5- -



[0389] 5 400ng(1.5mmol) 6-5- -2,3-
 15 160 , 6-
 5- , MS(ISN): 224.0 226.1((MH⁺)).

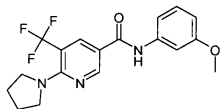
[0391] (e) 6-N(3-)-5- -



[0392] 6-N(3-)-5- - 6-5- -
 3- 1 : , MS(ISP): 374.1 376.1((MH⁺)).

[0394] 179

[0395] N(3-)-6- -1- -5- -

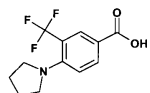


[0396] N(3-)-6- -1- -5- - 150
 6-N(3-)-5- - 143
 : , MS(ISP): 366.0((MH⁺)).

[0398] 180

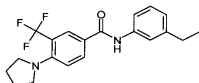
[0399] N(3-)-4- -1- -3- -

[0400] (a) 4-1- -3- -



[0401] 3.8 1.00g(4.8mmol) 4-3-()- 2.4 (2.06g
 28.8mmol) 24 100 ,
 , 4N HCl pH 3 ,
 (2.4 -1- -3- - , MS(ISN): 258.0((MH⁺)).

[0403] (b) N(3-)-4- -1- -3- -



[0404]

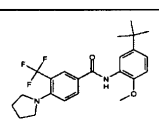
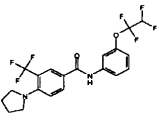
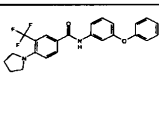
[0405] N(3- -)-4 -1- -3 - 4 -1- -3 -
 3 - 1 : , MS(ISP): 363 2(MH⁺).
 [0406] 181 193 180 :

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISP): (M+H) ⁺
181		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	3-에톡시-아닐린	N-(3-에톡시-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	378.39	379.3
182		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	3-이소프로필-아닐린	N-(3-이소프로필-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	376.42	377.3
183		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	3-이소프로폭시-아닐린	N-(3-이소프로폭시-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	392.42	393.1
184		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	1-(3-아미노-페닐)-에탄온	N-(3-아세틸-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	376.38	377.3
185		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	3-플루오로-아닐린	N-(3-플루오로-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	352.33	353.1

[0407]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISP): (M+H) ⁺
186		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	3-클로로-아닐린	N-(3-클로로-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	368.79	369.0 및 371.1
187		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	3-브로모-아닐린	N-(3-브로모-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	413.24	413.1 및 415.1
188		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	3-트라이플루오로메톡시-아닐린	4-피롤리딘-1-일-N-(3-트라이플루오로메톡시-페닐)-3-트라이플루오로메틸-벤즈아미드	418.34	419.3
189		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	3-메틸-아닐린	4-피롤리딘-1-일-N-m-톨릴-3-트라이플루오로메틸-벤즈아미드	348.37	349.3
190		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	3-다이플루오로메톡시-아닐린	N-(3-다이플루오로메톡시-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	400.35	401.4

[0408]

실시예	구조	RCOOH	R'NHR"	생성물의 화학 명칭	MW	MS(ISP): (M+H) ⁺
191		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	5-tert-부틸-2-메톡시-아닐린	N-(5-tert-부틸-2-메톡시-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	420.00	421.1
192		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	3-(1,1,2,2-테트라플루오로-에톡시)-아닐린	4-피롤리딘-1-일-N-[3-(1,1,2,2-테트라플루오로-에톡시)-페닐]-3-트라이플루오로메틸-벤즈아미드	450.35	451.2
193		4-피롤리딘-1-일-3-트라이플루오로메틸-벤조산	3-페녹시-아닐린	N-(3-페녹시-페닐)-4-피롤리딘-1-일-3-트라이플루오로메틸-벤즈아미드	426.44	427.2

[0409]

[0410]

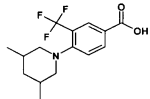
194

[0411]

(,)-4(3,5- - -1-)-N(3- -)-3- -

[0412]

(a) (,)-4(3,5- - -1-)-3- -



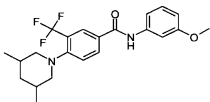
[0413]

[0414]

(,)-4(3,5- - -1-)-3- - 4- -3-(
)- (,)-3,5- - 180 (a) :
, MS(ISN: 300.5(MH⁻)).

[0415]

(b) (,)-4(3,5- - -1-)-N(3- -)-3- -



[0416]

[0417]

(,)-4(3,5- - -1-)-N(3- -)-3- -
(,)-4(3,5- - -1-)-3- - 3- -
1 : , MS(ISP): 407.5(MH⁺).

[0418]

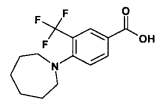
195

[0419]

4- -1- -N(3- -)-3- -

[0420]

(a) 4- -1- -3- -



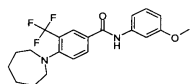
[0421]

[0422]

4- -1- -3- - 4- -3-()-
180 (a) : , MS(ISN: 286.4(MH⁻)).

[0423]

(b) 4- -1- -N(3- -)-3- -



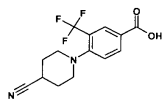
[0424]

[0425] 4 -1- -N(3 -)-3 - 4 -1- -3 -
 3 - 1 : , MS(ISP): 393.0((MH)⁺).

[0426] **196**

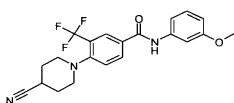
[0427] **4(4 - -1-)-N(3 -)-3 -**

[0428] (a) 4(4 - -1-)-3 -



[0429] 4(4 - -1-)-3 - 4 -3(-)-
 -4 180 (a) : , MS(ISN): 297.5((MH)⁻).

[0431] (b) 4(4 - -1-)-N(3 -)-3 -

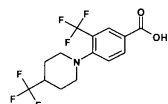


[0432] 4(4 - -1-)-N(3 -)-3 - 4(4 - -
 1-)-3 - 3 - 1 : ,
 MS(ISP): 404.4((MH)⁺).

[0434] **197**

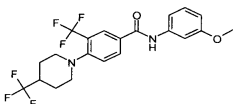
[0435] **N(3 -)-3 - 4(4 - -1-)-**

[0436] (a) 3 - 4(4 - -1-)-



[0437] 3 - 4(4 - -1-)- 4 -3(-)-
 4 - 180 (a) : ,
 MS(ISN): 340.3((MH)⁻).

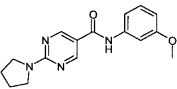
[0439] (b) N(3 -)-3 - 4(4 - -1-)-



[0440] N(3 -)-3 - 4(4 - -1-)- 3
 -4(4 - -1-)- 3 - 1
 : , MS(ISP): 447.1((MH)⁺).

[0442] **198**

[0443] **2 -1- - -5- (3 -)-**

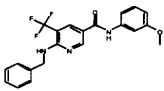
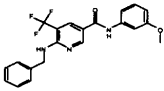
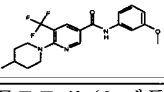
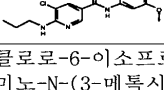
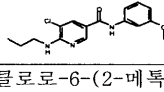
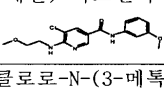
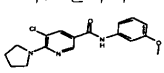


[0444] 2- -1- - -5- (3 -)- 2- -1- - -5- 3

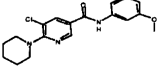
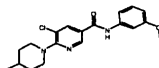
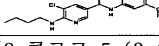
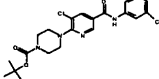
- 1 : , MS(ISP): 299.0(MH⁺).

[0446]

199 209 143 :

실시예	구조	6-클로로-N-니코틴아미드	R'NHR"	반응온도(℃)	반응시간(분)	MW	MS(1SN): (M-H) ⁻
199	6-벤질아미노-N-(3-메톡시-페닐)-5-트라이플루오로메틸-니코틴아미드 	6-클로로-N-(3-메톡시-페닐)-5-트라이플루오로메틸-니코틴아미드	벤질아민	250	15	401.39	400.3
200	6-이소프로필아미노-N-(3-메톡시-페닐)-5-트라이플루오로메틸-니코틴아미드 	6-클로로-N-(3-메톡시-페닐)-5-트라이플루오로메틸-니코틴아미드	이소프로필아민	250	15	353.34	352.2
201	4-메틸-3'-트라이플루오로메틸-3,4,5,6-테트라하이드로-2H-[1,2']바이피리딘-5'-카복실산(3-메톡시-페닐)-아미드 	6-클로로-N-(3-메톡시-페닐)-5-트라이플루오로메틸-니코틴아미드	4-메틸-피페리딘	250	15	393.41	392.1
202	5-클로로-N-(3-메톡시-페닐)-6-프로필아미노-니코틴아미드 	5,6-다이클로로-N-(3-메톡시-페닐)-니코틴아미드	프로필아민	180	15	319.79	
203	5-클로로-6-이소프로필아미노-N-(3-메톡시-페닐)-니코틴아미드 	5,6-다이클로로-N-(3-메톡시-페닐)-니코틴아미드	이소프로필아민	1180	15	319.79	
204	5-클로로-6-(2-메톡시-에틸아미노)-N-(3-메톡시-페닐)-니코틴아미드 	5,6-다이클로로-N-(3-메톡시-페닐)-니코틴아미드	2-메톡시-에틸아민	180	15	335.79	
205	5-클로로-N-(3-메톡시-페닐)-6-피롤리딘-1-일-니코틴아미드 	5,6-다이클로로-N-(3-메톡시-페닐)-니코틴아미드	피롤리딘	180	15	331.80	

[0447]

206	3'-클로로-3,4,5,6-테트라하이드로-2H-[1,2']바이피리딘일-5'-카복실산 (3-메톡시-페닐)-아미드 	5,6-다이클로로-N-(3-메톡시-페닐)-니코틴아미드	피페리딘	250	15	345.83	
207	3'-클로로-4-메틸-3,4,5,6-테트라하이드로-2H-[1,2']바이피리딘일-5'-카복실산 (3-메톡시-페닐)-아미드 	5,6-다이클로로-N-(3-메톡시-페닐)-니코틴아미드	4-메틸-피페리딘	250	15	359.86	
208	6-부틸아미노-5-클로로-N-(3-메톡시-페닐)-니코틴아미드 	5,6-다이클로로-N-(3-메톡시-페닐)-니코틴아미드	부틸아민	180	15	333.82	
209	4-[3-클로로-5-(3-클로로-페닐카바모일)-피리딘-2-일]-피페라진-1-카복실산 tert-부틸 에스터 	5,6-다이클로로-N-(3-메톡시-페닐)-니코틴아미드	피페라진-1-카복실산 tert-부틸 에스터	120	15	451.35	

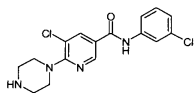
[0448]

210

[0449]

[0450]

5- -N(3- -)-6- -1- -



[0451]

[0452]

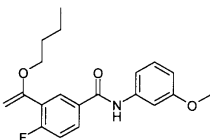
2 1N HCl 2 200ng(0.443nmol) 4-[3- -5-(3- - -)- -2-]-
-1- tert- (209) , 80 1.5
 , 2N NaOH , , 5- -N(3- -)-6-
-1- - : MS(ISP): 351.2 353.2((MH)⁺).

[0453]

211

[0454]

3-(1- -)-4- -N(3- -)-



[0455]

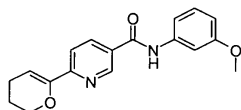
[0456]

2 DMSO 0.2 1- -3- 300ng(0.925nmol) 3- -4- -
N(3- -)- (71), 8ng(0.037nmol) Pd(II) 31ng(0.075nmol) 1,3-
() , 3 185ng(0.24 , 1.85nmol) N
112ng(0.16 , 1.11nmol) ,
170 15 , /
78.22 - 3-(1- -)-4- -N-
(3- -)- : MS(ISP): 344.2((MH)⁺).

[0457]

212

[0458] 6-(5,6-dihydro-2H-pyridin-2-yl)-N(3-methoxyphenyl)-

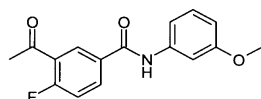


[0459]

[0460] 20ng(0.086nmol) (2-) , 9ng(0.016nmol) () 80.8ng(111 ,
 0.800nmol) 4 140ng(0.533nmol) 6-N(3-)- ()
 277 , 10 , 298ng(0.800nmol) -(5,6-
 -4H -2-)- , 24 110 .
 (Dicalite) , .
 , Na₂SO₄ , . /
 60:40 40:60 - . 6-(5,6-
 -4H -2-)-N(3-)- : MS(ISP): 311.1((MH⁺)).

[0461] 213

[0462] 3-(4-fluorophenyl)-N(3-methoxyphenyl)-

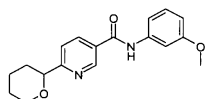


[0463]

[0464] 2 2N HCl 2 90ng(0.26nmol) 3-(1-)-4- -N(3-)- ()
 211) , 30 .
 , Na₂SO₄ , , .
 / 70:30 - . 3-
 -4- -N(3-)- : MS(ISN): 286.1((MH⁺)).

[0465] 214

[0466] -N(3-)-6-()-2-)-



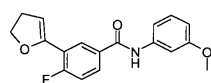
[0467]

[0468] 3 30ng(0.097nmol) 6-(5,6-)-4H -
 2-)-N(3-)- , 1
 , , , / 1:2
 -N(3-)-6-()-
 2-)- : MS(ISN): 313.0((MH⁺)).

[0469] 215

[0470] -4- -N(3-)-3-()-2-)-

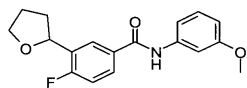
[0471] (a) 3-(4,5-)-2-)-4- -N(3-)- -



[0472]

[0473] 3-(4,5-)-2-)-4- -N(3-)- 6- -N(3-)-
 (277) -(4,5-)-2-)- 170 15
 212 : , MS(ISP): 314.1((MH⁺)).

[0474] (b) -4 -N(3 -)-3(-2)-



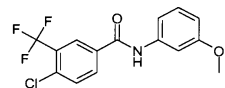
[0475]

[0476] -4 -N(3 -)-3(-2)- 3(4 5 -
2-)-4 -N(3 -)- 214 :

MS(ISP): 316 O(MH⁺).

[0477] 216

[0478] 4 -N(3 -)-3 -



[0479]

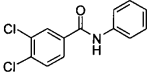
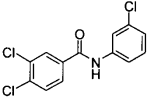
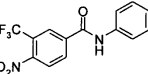
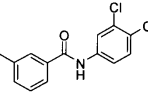
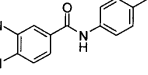
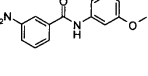
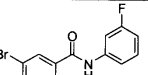
[0480] 4 -N(3 -)-3 - 3 - 4 -3
- 1 :

MS(ISN): 328 O(MH⁺).

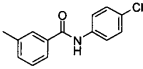
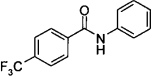
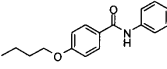
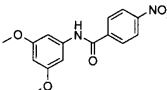
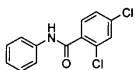
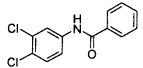
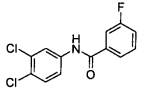
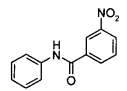
[0481]

[0482] 217 333

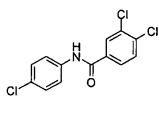
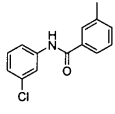
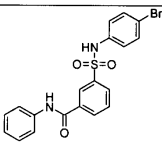
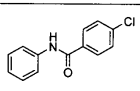
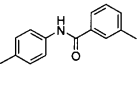
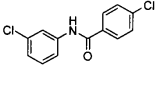
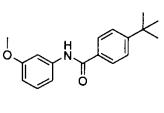
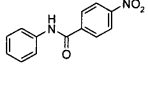
[0483]

실시예	구조	화학 명칭	참고문헌
217		3,4-다이클로로-N-페닐- 벤즈아미드	Monatshefte fuer Chemie (1966), 97(1), 271-80.
218		3,3',4- 트라이클로로벤즈아닐라이드	CH 609558
219		3-트라이플루오로메틸-4- 나이트로-N-페닐-벤즈아미드	Macromolecular Rapid Communications (2002), 23(12), 665-671.
220		N-(3,4-다이클로로-페닐)-3- 메틸-벤즈아미드	Journal of Agricultural and Food Chemistry (1986), 34 (4), 725- 32.
221		3,4-다이클로로-N-p-톨릴- 벤즈아미드	Monatshefte fuer Chemie (1966), 97(1), 271-80.
222		N-(3-메톡시-페닐)-3-나이트로- 벤즈아미드	Journal of Combinatorial Chemistry (2002), 4(6), 549-551.
223		3-브로모-N-(3-플루오로-페닐)- 벤즈아미드	Pharmazie (1998), 53(3), 193-195.

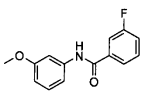
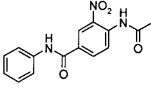
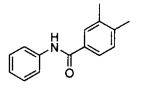
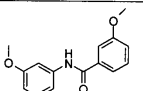
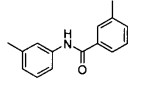
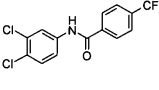
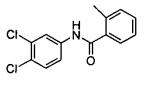
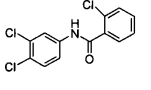
[0484]

224		N-(4-클로로-페닐)-3-메틸- 벤즈아미드	Bulletin de la Societe Chimique de France (1963), (4), 862-72.
225		N-페닐-4-트라이플루오로메틸- 벤즈아미드	Journal of Organic Chemistry (1996), 61(21), 7482-7485.
226		4-부톡시-N-페닐-벤즈아미드	Journal of the Chemical Society (1949), 3043-6.
227		N-(3,5-다이메톡시-페닐)-4- 나이트로-벤즈아미드	Journal of Medicinal Chemistry (1996), 39(17), 3375-3384.
228		2,4-다이클로로-N-페닐- 벤즈아미드	Journal of Organic Chemistry (1983), 48(23), 4391-3.
229		N-(3,4-다이클로로-페닐)- 벤즈아미드	Helvetica Chimica Acta (1964), 47(1), 162-5.
230		N-(3,4-다이클로로-페닐)-3- 플루오로-벤즈아미드	Agricultural and Biological Chemistry (1976), 40(1), 213-14.
231		3-나이트로-N-페닐-벤즈아미드	Journal of Medicinal Chemistry (1986), 29(8), 1534-7.

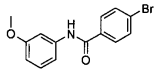
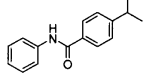
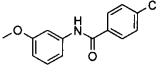
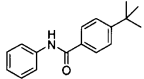
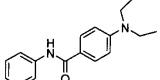
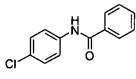
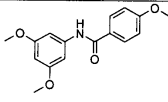
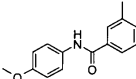
[0485]

232		3,4-다이클로로-N-(4-클로로-페닐)-벤즈아미드	Journal of the American Chemical Society (1957), 79 1236-45.
233		N-(3-클로로-페닐)-3-메틸-벤즈아미드	Chemische Berichte (1990), 123(11), 2191-4.
234		3-(4-브로모-페닐설파모일)-N-페닐-벤즈아미드	WO 2005087217
235		4-클로로벤즈아닐라이드	Chemische Berichte (1964), 97(2), 472-9.
236		3-메틸-N-p-톨릴-벤즈아미드	US 2004235888
237		4-클로로-N-(3-클로로-페닐)-벤즈아미드	Chemische Berichte (1990), 123(11), 2191-4.
238		4-tert-부틸-N-(3-메톡시-페닐)-벤즈아미드	DE 3830054
239		N-페닐-4-나이트로벤젠카복사미드	Journal of Organic Chemistry (2006), 71(9), 3375-3380.

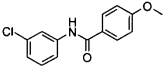
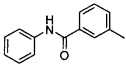
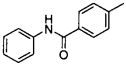
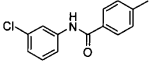
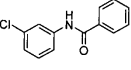
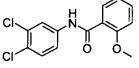
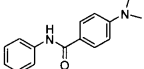
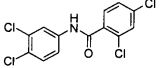
[0486]

240		3-플루오로-N-(3-메톡시-페닐)- 벤즈아미드	Magnetic Resonance in Chemistry (1997), 35(8), 543-548.
241		4-아세틸아미노-3-나이트로-N- 페닐-벤즈아미드	Journal of Medicinal Chemistry (1984), 27(8), 1083-9.
242		3,4-다이메틸-N-페닐벤즈아미드	Journal of the Chemical Society (1931), 2323-31.
243		3-메톡시-N-(3-메톡시-페닐)- 벤즈아미드	Journal of Organic Chemistry (1958), 23, 349-53.
244		3-메틸-N-m-톨릴-벤즈아미드	Helvetica Chimica Acta (1963), 46(4), 1148-50.
245		N-(3,4-다이클로로-페닐)-4- 트라이플루오로메틸-벤즈아미드	CH 609558
246		N-(3,4-다이클로로-페닐)-2- 메틸-벤즈아미드	Pesticide Biochemistry and Physiology (1989), 34(3), 255-76.
247		2-클로로-N-(3,4-다이클로로- 페닐)-벤즈아미드	Zhurnal Obschei Khimii (1966), 36(4), 638-9.

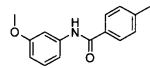
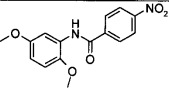
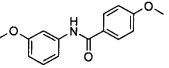
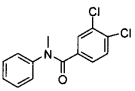
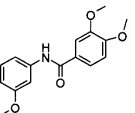
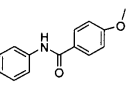
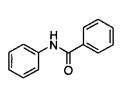
[0487]

248		4-브로모-N-(3-메톡시-페닐)- 벤즈아미드	Journal of the Chemical Society, Transactions (1925), 127, 990- 5.
249		4-이소프로필-N-페닐-벤즈아미드	Helvetica Chimica Acta (1958), 41 1606-32.
250		4-클로로-N-(3-메톡시-페닐)- 벤즈아미드	Taehan Hwahakhoe Chi (1972), 17(3), 193-7.
251		4-tert-부틸-N-페닐-벤즈아미드	Nippon Noyaku Gakkaishi (1985), 10(4), 697-702.
252		4-다이에틸아미노-N-페닐- 벤즈아미드	Tetrahedron Letters (1971), (4), 321-2.
253		N-(4-클로로-페닐)-벤즈아미드	Journal of Medicinal Chemistry (1989), 32(5), 1033-8.
254		N-(3,5-다이메톡시-페닐)-4- 메톡시-벤즈아미드	Monatshefte fuer Chemie (1931), 57 63-70.
255		N-(4-메톡시-페닐)-3-메틸- 벤즈아미드	Journal of Combinatorial Chemistry (2002), 4(6), 549-551.

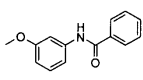
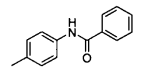
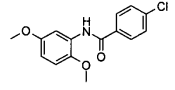
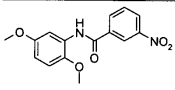
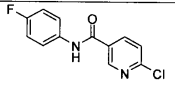
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256		N-(3-클로로-페닐)-4-메톡시-벤즈아미드	Journal of Physical Organic Chemistry (1994), 7(6), 273-9.
257		3-메틸-N-페닐-벤즈아미드	Chemische Berichte (1990), 123(11), 2191-4.
258		4-메틸-N-페닐-벤즈아미드	Chemische Berichte (1990), 123(11), 2191-4.
259		N-(3-클로로-페닐)-4-메틸-벤즈아미드	Journal of Physical Organic Chemistry (1994), 7(6), 273-9.
260		N-(3-클로로-페닐)-벤즈아미드	Journal of Physical Organic Chemistry (1994), 7(6), 273-9.
261		N-(3,4-다이클로로-페닐)-2-메톡시-벤즈아미드	Archiv der Pharmazie (Weinheim, Germany) (1988), 321(7), 419-22.
262		4-다이메틸아미노-N-페닐-벤즈아미드	Helvetica Chimica Acta (1919), 2, 717-9.
263		2,4-다이클로로-N-(3,4-다이클로로-페닐)-벤즈아미드	Journal of Pharmacy and Pharmacology (1964), 16(3), 163-73.

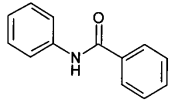
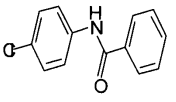
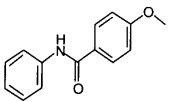
[0489]

264		N-(3-메톡시-페닐)-4-메틸-벤즈아미드	Journal of Medicinal Chemistry (1986), 29(5), 820-5.
265		N-(2,5-다이메톡시-페닐)-4-나이트로-벤즈아미드	EP 661266
266		4-메톡시-N-(3-메톡시-페닐)-벤즈아미드	Australian Journal of Chemistry (1984), 37(4), 831-44.
267		3,4-다이클로로-N-메틸-N-페닐-벤즈아미드	Farmaco, Edizione Scientifica (1969), 24(12), 1025-37.
268		3,4-다이메톡시-N-(3-메톡시-페닐)-벤즈아미드	Bulletin de la Societe Chimique de France (1965), (3), 848-58.
269		4-메톡시-N-페닐-벤즈아미드	Journal of Physical Organic Chemistry (1994), 7(6), 273-9.
270		N-페닐-벤즈아미드	Journal of Physical Organic Chemistry (1994), 7(6), 273-9.

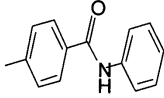
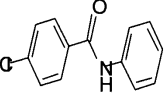
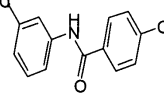
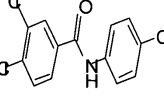
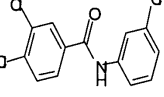
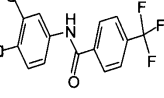
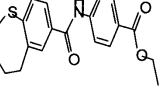
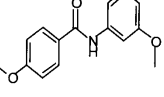
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271		N-(3-메톡시-페닐)-벤즈아미드	Journal of the American Chemical Society (1958), 80 3328-32.
272		N-p-톨릴-벤즈아미드	Journal of Physical Organic Chemistry (1994), 7(6), 273-9.
273		4-클로로-N-(2,5-다이메톡시-페닐)-벤즈아미드	Perkin 1 (2000), (2), 205-210.
274		N-(2,5-다이메톡시-페닐)-3-나이트로-벤즈아미드	EP 440195
275		6-클로로-N-(4-플루오로-페닐)-니코틴아미드	W002/053544

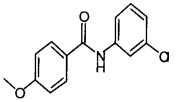
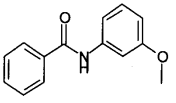
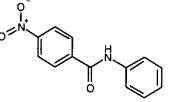
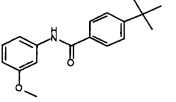
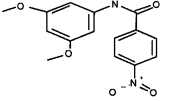
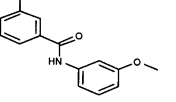
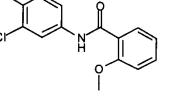
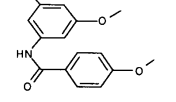
[0491]

실시예	구조	화학 명칭	참고문헌 (SciFinder)
276	N-페닐-벤즈아미드		93-98-1
277	N-(4-클로로-페닐)-벤즈아미드		2866-82-2
278	4-메톡시-N-페닐-벤즈아미드		7465-88-5

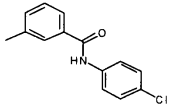
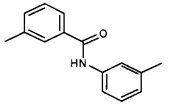
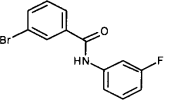
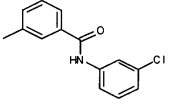
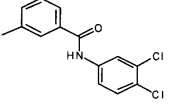
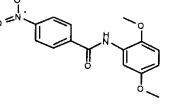
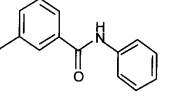
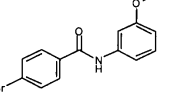
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279	4-메틸-N-페닐-벤즈아미드		6833-18-7
280	4-클로로-N-페닐-벤즈아미드		6833-15-4
281	4-클로로-N-(3-클로로-페닐)-벤즈아미드		2447-96-3
282	3,4-다이클로로-N-(4-클로로-페닐)-벤즈아미드		06.04.2448
283	3,4-다이클로로-N-(3-클로로-페닐)-벤즈아미드		05.03.2448
284	N-(3,4-다이클로로-페닐)-4-트라이플루오로메틸-벤즈아미드		56661-54-2
285	에틸 p-(2,3,4,5-테트라하이드로-1-벤조티에핀-7-카복사미도)벤조에이트		129790-95-0
286	4-메톡시-N-(3-메톡시-페닐)-벤즈아미드		91099-22-8

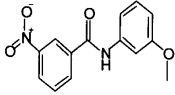
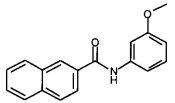
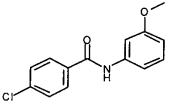
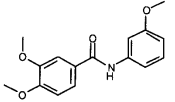
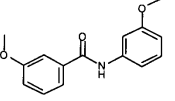
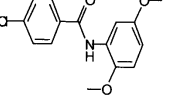
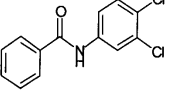
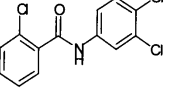
[0493]

287	N-(3-클로로-페닐)-4-메톡시-벤즈아미드		7465-93-2
288	N-(3-메톡시-페닐)-벤즈아미드		13031-49-7
289	4-나이트로-N-페닐-벤즈아미드		3460-11-5
290	4-tert-부틸-N-(3-메톡시-페닐)-벤즈아미드		129504-97-8
291	N-(3,5-다이메톡시-페닐)-4-나이트로-벤즈아미드		152586-91-9
292	3-플루오로-N-(3-메톡시-페닐)-벤즈아미드		195378-99-5
293	N-(3,4-다이클로로-페닐)-2-메톡시-벤즈아미드		117367-18-7
294	N-(3,5-다이메톡시-페닐)-4-메톡시-벤즈아미드		134029-84-8

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295	N-(4-클로로-페닐)-3-메틸-벤즈아미드		81636-14-8
296	3-메틸-N-m-톨릴-벤즈아미드		53205-69-9
297	3-브로모-N-(3-플루오로-페닐)-벤즈아미드		206062-09-1
298	N-(3-클로로-페닐)-3-메틸-벤즈아미드		96749-32-5
299	N-(3,4-다이클로로-페닐)-3-메틸-벤즈아미드		102587-39-3
300	N-(2,5-다이메톡시-페닐)-4-나이트로-벤즈아미드		169945-47-5
301	3-메틸-N-페닐-벤즈아미드		23099-05-0
302	4-브로모-N-(3-메톡시-페닐)-벤즈아미드		313268-57-4

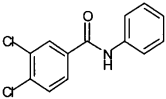
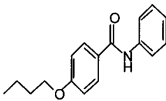
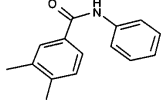
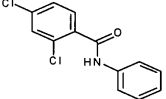
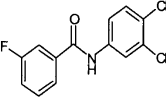
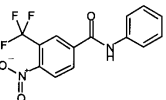
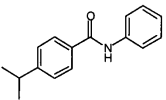
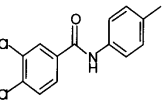
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303	N-(3-메톡시-페닐)-3-나이트로-벤즈아미드		107915-06-0
304	나프탈렌-2-카복실산(3-메톡시-페닐)-아미드		88606-02-4
305	4-클로로-N-(3-메톡시-페닐)-벤즈아미드		42182-03-6
306	3,4-다이메톡시-N-(3-메톡시-페닐)-벤즈아미드		1718-91-8
307	3-메톡시-N-(3-메톡시-페닐)-벤즈아미드		97492-32-5
308	4-클로로-N-(2,5-다이메톡시-페닐)-벤즈아미드		262436-40-8
309	N-(3,4-다이클로로-페닐)-벤즈아미드		10286-75-6
310	2-클로로-N-(3,4-다이클로로-페닐)-벤즈아미드		7017-22-3

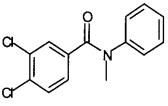
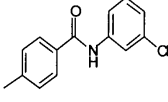
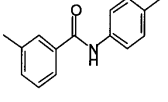
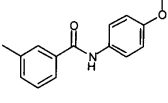
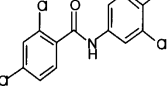
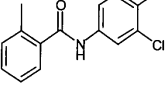
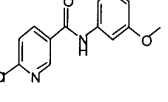
[0496]

311	N-(2,5-다이메톡시-페닐)-3-나이트로-벤즈아미드		142000-62-2
312	3-나이트로-N-페닐-벤즈아미드		2243-73-4
313	N-p-톨릴-벤즈아미드		582-78-5
314	N-(3-메톡시-페닐)-4-메틸-벤즈아미드		101078-45-9
315	N-(3-클로로-페닐)-벤즈아미드		6004-21-3
316	4-tert-부틸-N-페닐-벤즈아미드		65861-72-5
317	N-페닐-4-트라이플루오로메틸-벤즈아미드		347-80-8
318	3-(4-브로모-페닐설파모일)-N-페닐-벤즈아미드		347-80-8

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319	3,4-다이클로로-N-페닐-벤즈아미드		6043-42-1
320	4-부톡시-N-페닐-벤즈아미드		33707-64-1
321	3,4-다이메틸-N-페닐-벤즈아미드		164290-86-2
322	2,4-다이클로로-N-페닐-벤즈아미드		6043-39-6
323	N-(3,4-다이클로로-페닐)-3-플루오로-벤즈아미드		58954-98-6
324	4-나이트로-N-페닐-3-트라이플루오로메틸-벤즈아미드		478797-87-4
325	4-이소프로필-N-페닐-벤즈아미드		15088-90-1
326	3,4-다이클로로-N-p-톨릴-벤즈아미드		6043-43-2

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327	3,4-다이클로로-N-메틸-N-페닐-벤즈아미드		26094-80-4
328	N-(3-클로로-페닐)-4-메틸-벤즈아미드		81636-13-7
329	3-메틸-N-p-톨릴-벤즈아미드		97405-27-1
330	N-(4-메톡시-페닐)-3-메틸-벤즈아미드		313367-17-8
331	2,4-다이클로로-N-(3,4-다이클로로-페닐)-벤즈아미드		83426-48-6
332	N-(3,4-다이클로로-페닐)-2-메틸-벤즈아미드		71267-58-8
333	6-클로로-N-(3-메톡시-페닐)-니코틴아미드		224817-08-7

[0499]