

(19)  
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(KR)  
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(11)  
(24)

2004 03 22  
10-0423892  
2004 03 09

(21) 10-2001-0075991  
(22) 2001 12 03

(65)  
(43)

10-2003-0045340  
2003 06 11

(73) 5가 500

(72) 702 402

1 46-5 101 205

11 808

301 105

522-1

(74)

:

(54)

(nitrogen sweep)

(mevinic acid)

(lactonization)

(nitrogen sweep)

(hypercholesterolemia)

가

g

(lovastatin)

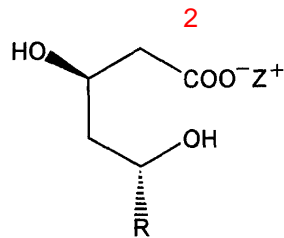
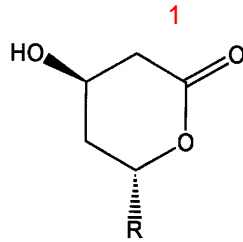
2

(simvastatin)

HMG-CoA

(statins)

1



R

, Z

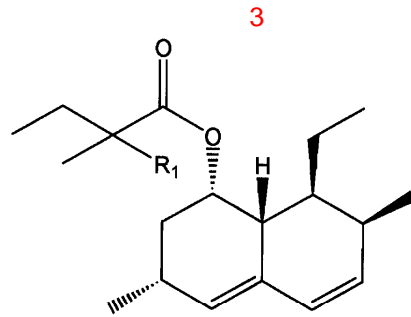
3

R<sub>1</sub>

H

CH<sub>3</sub>

:



가

1

( )

+ H<sub>2</sub>O(+ NH<sub>3</sub>)

4,820,850

( )

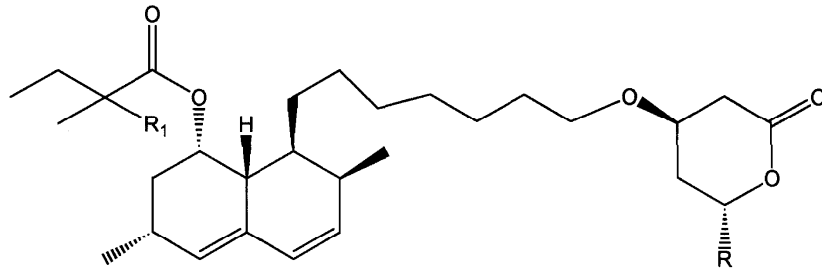
1a

(110 )

가

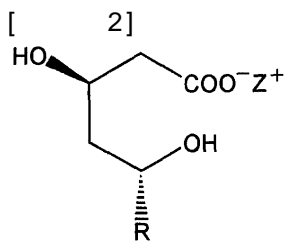
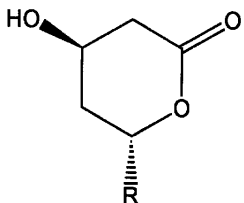
가 :

1a

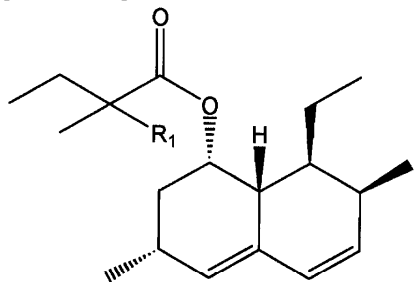


가 , R R<sub>1</sub> 0.4% 가 , ,  
 , 97-11286 ( 4,916,239 ) ,  
 , 가 ,  
 1.2 1.5 , , ,  
 , 가 가 , 가 ,  
 , (work-up) 9 12 가 0.2% , 가 , 가,  
 , 5,917,058 0.15% , , 35 40 ,  
 , 가 , 가 ,  
 ( ) 3 7 , 가 , 가 ,  
 , 가 , 가 3- ,  
 , 4,916,239 5,917,058 , 가 , 가 ,  
 가 H + 가 가 ,  
 ( ) , ,

[ 1] 2 , 1 :



R, Z, R<sub>1</sub>, H, CH<sub>3</sub> :



(2,2-4,5,6-), 0.05% (2(S),6(R)-2H-2-), -1,2,6,7,8,8a(R)-, 1, 6(R)-[2-[8(S)-]-1(S)]-4(R)-3,

가 1:1 (1a) 3- 3- 1 40 3 n- 8 10 8 10 가 가 2 3 / / 가

[ 1 ] 6(R)-[2-[8(S)-(2,2-3,4,5,6-)-2(S),6(R)-2H-2- (2.42 g, 5.3 mmoles) -1,2,6,7,8,8a(R)- (50 Mℓ) ]-1(S)]-4(R)-8(S)-(2,2-)-1(S)-]-3(R),5( (50 Mℓ) 2.4 g 가 .30 가 5 Mℓ / (1:10(v/v)) 20 Mℓ 50 Mℓ 가 3 .40 (HPLC)가 99.0% 2.12 g( : 94.9%) 0.02% [ 2 ]

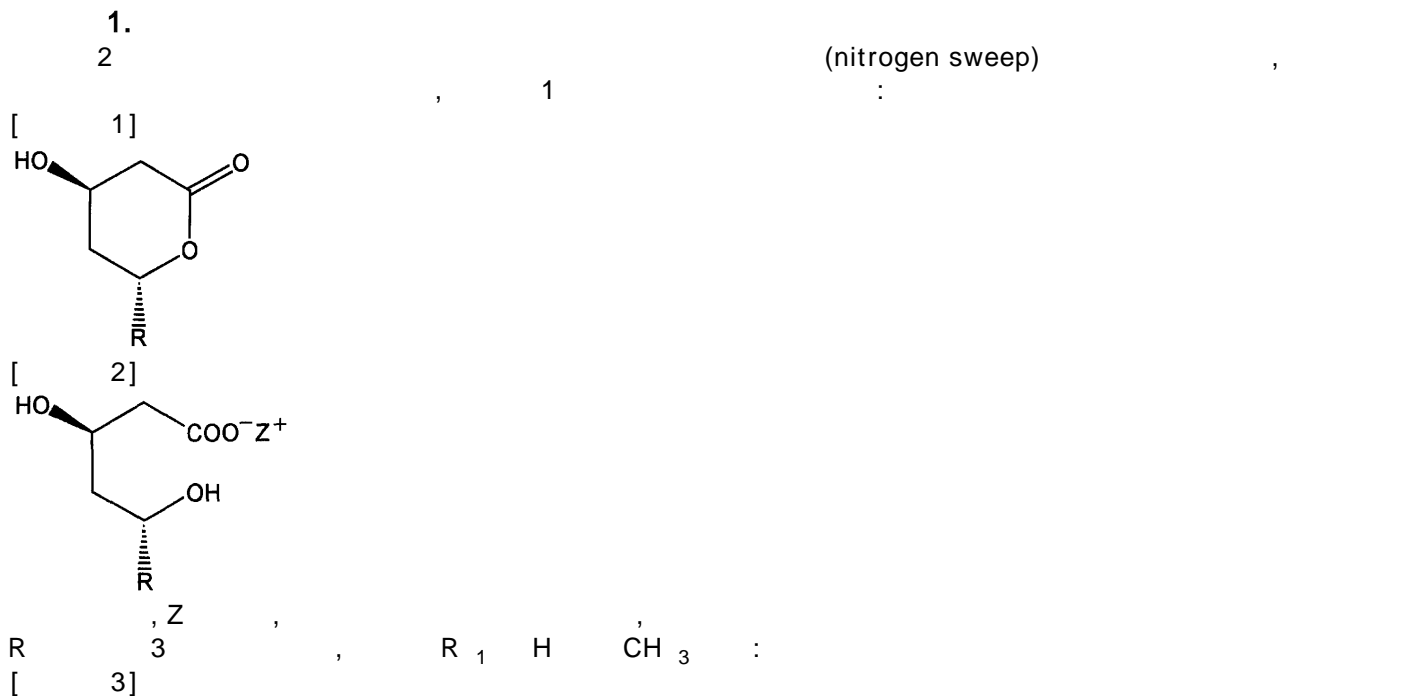
6(R)-[2-[8(S)-(2,2,3,4,5,6-)-2(S),6(R)-1,2,6,7,8,8a(R)-]-1(S)-]-4(R)-  
 7-[1,2,6,7,8,8a(R)-2(S),6(R)-8(S)-(2,2,3,4,5,6-)-1(S)-]-3(R),5(R)-  
 (2.42 g, 5.3 mmol) (50 mL) 2.4 g 가 .3  
 80 3 25 (50 mL) 가 .3  
 21.2 mL 가 30 21.2 mL 가 40 가 .  
 4 / (1:1(v/v)) 20 mL .40 (HPLC)가 99.0  
 % 1.97 g( : 88.2%) . 0.02% .

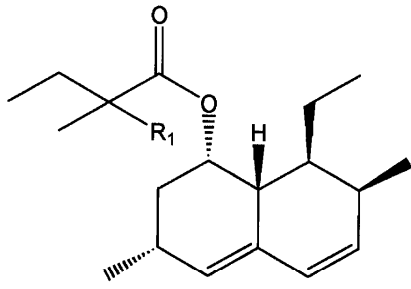
[ 3 ]  
 6(R)-[2-[8(S)-(2,2,3,4,5,6-)-2(S),6(R)-1,2,6,7,8,8a(R)-]-1(S)-]-4(R)-  
 7-[1,2,6,7,8,8a(R)-2(S),6(R)-8(S)-(2,2,3,4,5,6-)-1(S)-]-3(R),5(R)-  
 (2.42 g, 5.5 mmol) (HPLC)가 99.0% 2.1 g( : 93.0%)  
 0.01% .

[ 4 ]  
 6(R)-[2-[8(S)-(2,2,3,4,5,6-)-2(S),6(R)-1,2,6,7,8,8a(R)-]-1(S)-]-4(R)-  
 7-[1,2,6,7,8,8a(R)-2(S),6(R)-8(S)-(2,2,3,4,5,6-)-1(S)-]-3(R),5(R)-  
 (2.42 g, 5.5 mmol) (HPLC)가 99.1% 2.1 g( : 93.5%)  
 0.02% .

0.05% , 0.02%

(57)





2. 1 , 가 , , 2 ' , , ,
3. 2 , 가 ,
4. 1 3 , 2 1 40
5. 1 , , , , n- , , , 1 ,
6. 5 , 가 2 1 8 10 8 10 , 2 3 19 21 .
7. 0.05% 1 .
8. 0.05% 6(R) - [2 - [8(S) - (2,2 - ) - 2(S),6(R) - -1,2,6,7,8,8 a(R) - ] - 1(S) ] - 4(R) - -3,4,5,6 - -2H - -2 - .