

(19)  
(12)

(KR)  
(B1)

(51) 。 Int. Cl. <sup>7</sup>  
A61K 39/05

(45)  
(11)  
(24)

2003 03 03  
10 - 0374813  
2003 02 20

(21) 10 - 2000 - 0018088  
(22) 2000 04 07

(65)  
(43)

2001 - 0099522  
2001 11 09

(73)

227 - 3

(72)

131 1104

42 - 1 106 605

642 304

500 2 13 1102

440 - 17

2 - 512

2 111 - 116

(74)

:

(54)

4가

B

4가

B

70 mIU/mL

B

10 BWDU/mL

90%

가 2

4

1 , , B 4가 ( " DTaPH )

2 DTaPH

3 DTaPH B

4 DTaPH B

5 DTaPH B

), , B 4가 ( "DTaPH "

B , , B EPI(E xpanded program on immunization)

B B ( ( ) ) ,

B 가 B 가

, ) 가 DTaPH EPI DTP( , 가 , ) 가 ( 642355, 1998. 7. 15 ; 1992 - 0009729, ).

B 가 DTaPH 가 가 B (WHO headquarters, Informal consultation on quadrivalent diphtheria - tet anus - pertussis - hepatitis B vaccine, 1992)

, DTaPH B DTP (compatibility) 가 가



B , B , B , B

DTaPH , B , B , B

, DTaPH 10 12 µgPN/mL, B 30 50 Lf/mL, 4 6 Lf/mL, 20 24µg/mL, 가 5 00 600 µgAl/mL

가가 ( , 1999) " "

B 4 3

1 0.5mL , 가 가

1 : 1 :

Corynebacterium diphtheriae Park William strain 0.9%가 가 36C 28

2 : 2 :

Clostridium tetani Harvard strain 0.45%가 가 36C 28

3 : 3 :

Bordetella pertussis 0.6%가 가 36C 21

4 : B 4 : B

B Hansenula polymorpha , , , , ,

5 : 5 :

50Lf/mL, 가 2 8 500Lf/mL, 120µgPN/mL

6 : B 6 : B

B B pH 5 가  
7 2 8 B 72 µg/mL

7 : DTaPH 7 : DTaPH

1 6 DTaPH

DTaPH 가

가

[ 1 ]

	A	B( )
(Lf/mL)	30	50
(Lf/mL)	5	15
(µgPN/mL)	10	12
B (µg/mL)	24	24
(µgAl/mL)	500	800

DTaPH (0.05mg/mL 2 - phenoxyethano)  
0.1mg/mL 가  
I(3 6mg/mL) 가 pH 6.0 7.0

1 : DTaPH

7 DTaPH ( A, B ) , 5.7 , 1999,  
( " ( BWDU/mL ) )  
, A 9.6 BWDU/mL " "10 BWDU/mL "

[ 2 ]

	A	B
(BWDU/mL)	9.6	34.2

2 : DTaPH B

5 7 ICR 30 0.5mL ( A, B ) B 4 Abbott Ausab IMx kit

가(Ab GMT) 가 가 1mIU/mL  
 가 가 10mIU/mL

4, 5 A B ( 가, 가 )  
 B

[ 3 ]

		( )				
		0	15	45	75	105
가(mIU/mL)	A	351	407	396	376	423
	B	472	553	225	197	150
가 (%)	A	90	90	97	90	97
	B	100	93	83	83	73

3 : DTaPH 가

7 DTaPH ( A, B ) , B  
 가 " ( )  
 , 125 130, 1999 ; B , 310 313, 1999, )

mL , ( ) B 2 - 4 units/ml, 4 units/ml , 10IU/

B

가 가

가 B 가 B

가

(Hib), (IPV) 가 가  
 가

(57)

1.

, B ,

30 50Lf/mL , 4 6Lf/mL , 10 12µgPN/mL  
 , 20 24µg/mL B 500 600 µgAl/mL

2.

3.

4.

B

(a) 30 50Lf/mL , 4 6Lf/mL  
 10 12 $\mu$ gPN/mL ,

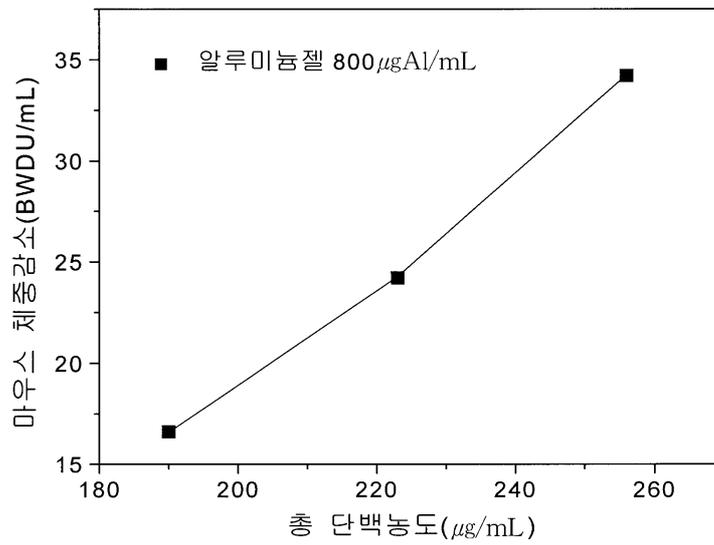
(b) (a) 20 24 $\mu$ g/mL B  
 가 500 600  $\mu$ gAl/mL가

5.

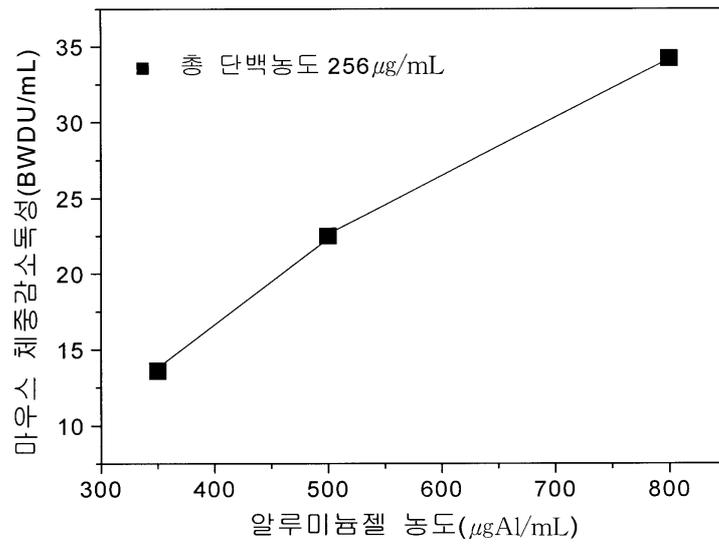
6.

7.

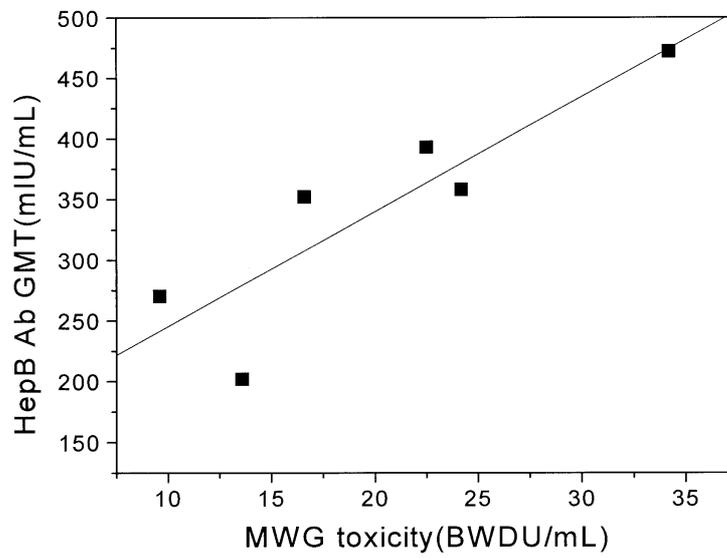
1



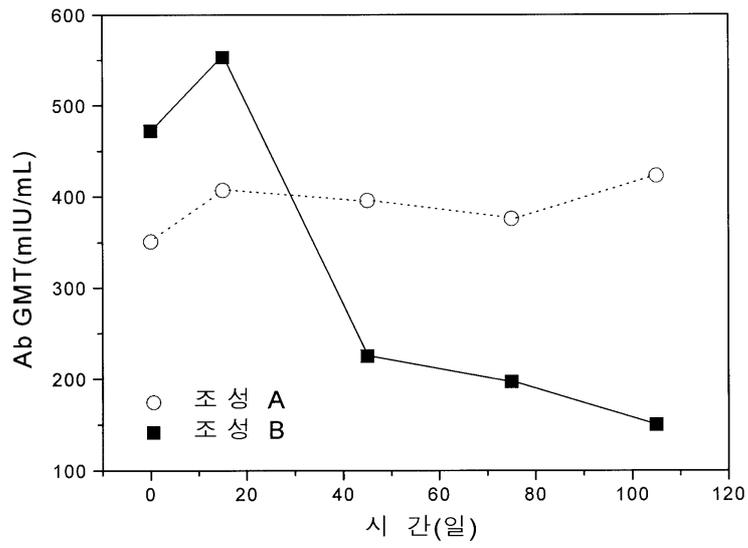
2



3



4



5

