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(12) (B1)

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(73) 159 17  
 892 - 9  
 (72) 103 1206  
 109 1505  
 8 - 2 310 304  
 108 101  
 415 - 1  
 5 702  
 131

(74)  
 :

(54)

(Ecklonia cava)  
 가 , , ,

, , , ,

(Ecklonia cava)

가 ,

가

가

가

(Melanocyte)  
(Tyrosinase)

(Melanin)

(Tyrosine)

가

(DOPAquinone)

가

가

(Ascorbic acid),

(Kojic acid),

(Ar

butin),

(Hydroquinone)

가

가

가

가

가

가

, 1,3 -

1 15 ,

5 10

2

가

10 50

1 15

가

15 35

12 24

가

(Ecklonia cava)

가

1 m

가

가

1

3 5 mm가

5 10 cm,

5 mm,

20 30 cm,

4 cm

, 2 가

가

가

2, 3

),

(

(

),

(

0.001 5 %,

0.005 1 %

, 0.001 %

가 , 5 %

가

1

24 2 3 cm 1 kg 9 15 25 12  
 5 가 (Buich, )  
 30 40 387g( )  
 2 15  
 1 1

[ 1 ]

		(g)
1		387
2	10%	362
3	20%	325
4	30%	350
5	40%	337
6	50%	350
7	60%	312
8	70%	300
9	80%	238
10	90%	263
11	100%	51
12	100%	178
13		14
14		10
15		15

1

glycosin) 0.05 M (pH 6.8) (Sigma, ) (t  
 0.1 mg/Ml

1 15 1,3 -  
 30, 60, 150, 300 µg/Ml  
 0.5 Ml 가 37 10 250 U/Ml  
 0.5 Ml 37 10  
 0.5 Ml  
 (Spectrophotometer) 475nm

1

2

1

$$\text{티로시나아제활성저해효과(\%)} = 100 - \left( \frac{\text{각추출물의흡광도}}{\text{대조군흡광도}} \right) \times 100$$

[ 2 ]

	(%)			
	10 ( $\mu\text{g}/\text{Ml}$ )	20 ( $\mu\text{g}/\text{Ml}$ )	50 ( $\mu\text{g}/\text{Ml}$ )	100 ( $\mu\text{g}/\text{Ml}$ )
1	12.34	14.56	15.82	39.56
2	11.39	16.46	26.27	35.13
3	16.60	31.58	47.37	61.94
4	27.12	35.88	56.21	72.32
5	30.06	45.57	61.39	74.37
6	35.44	50.32	70.25	82.00
7	18.04	36.71	58.86	72.47
8	39.23	48.34	67.96	82.04
9	40.88	50.28	66.30	78.45
10	43.65	56.637	73.76	82.87
11	38.67	58.56	77.07	88.12
12	29.79	47.61	64.63	81.38
13	53.72	63.30	78.99	87.50
14	31.91	48.94	54.52	66.49
15	23.94	47.61	58.24	72.87

2

1

o 3 IC<sub>50</sub> 50% IC<sub>5</sub>

1 ( 1), ( 2), ( 3)

6) (Albutin : 4), (Kojic acid : 5), (Ascorbic acid :

[ 3 ]

	IC <sub>50</sub> ( $\mu\text{g}/\text{Ml}$ )
( 10)	14.89
( 1)	17.87
( 2)	52.28
( 3)	29.04
( 4)	68.32
( 5)	6.21
( 6)	70.65

3

(crude extract)

2

B - 16 (ATCC CRL 6323)

50 Mℓ T - , 5% CO<sub>2</sub>, 37 4.5 g/ , 10% , 1 % 가 DMEM  
 , 5% CO<sub>2</sub>, 37 24 . 0.02% EDTA 0.05%  
 (PBS) 1 Mℓ 가 , 50 Mℓ T -  
 48 가 4.88 × 10<sup>6</sup> DMEM 50, 100,  
 150, 200 μg/Mℓ 5% CO<sub>2</sub>, 37 3 .  
 , 5%  
 (TCA)  
 1N NaOH 475 nm , (SIGMA Co.,  
 USA) , 4 .

[ 4 ]

(μg/Mℓ)	(%)
50	74.8
100	87.9
150	92.6
200	94.3

4

1

5

[ 5 ]

	( % )
	0.1
1,3 -	6.0
	2.0
	4.0
4000	1.0
20	0.5
	10.0
-9	0.05
	100

2

6

[ 6]

	( %)
	0.1
	0.4
1,3-	6.0
	1.2
	4.0
	1.0
	0.25
	3.0
	5.0
	3.0
	2.0
60	1.5
	0.6
	0.15
	100

3

7 .

[ 7]

	( %)
	0.1
	7.0
	2.5
	2.0
	1.5
	10.0
	2.0
60	1.5
	0.8
	3.0
1,3-	6.0
	4.0
	0.5
	0.1
	100

4

8 .

[ 8 ]

	( % )
	0.1
	10.0
1500	2.0
	0.1
	0.3
(EDTA)	0.02
-9	0.04
	0.1
	8.0
	0.2
	0.18
-25	0.6
	6.0
	100

5

9

[ 9 ]

	( % )
	0.1
	2.0
	2.5
	1.0
60	1.5
	0.6
	5.0
	5.0
	35.0
	1.0
	0.1
	0.12
	6.0
	0.5
	100

6

10

[ 10]

	( %)
	0.1
	15.0
	0.15
	3.0
1500	2.0
	0.4
	0.1
	6.0
40	0.3
	100

3

가

가 .

40 20 35  
3

2

0.1 %

3  
2

1 (Colorimeter)

11

[ 11]

	L
	3.6
	0.8

L= -

(57)

1.

(Ecklonia cava)

2.

1 가 , , 10 50 1 15 1 15 / ,

3.

1 , , , , , , , , 1,3 - ,

4.

1 , 0.001 5 %

5.

4 , 0.001 1 %