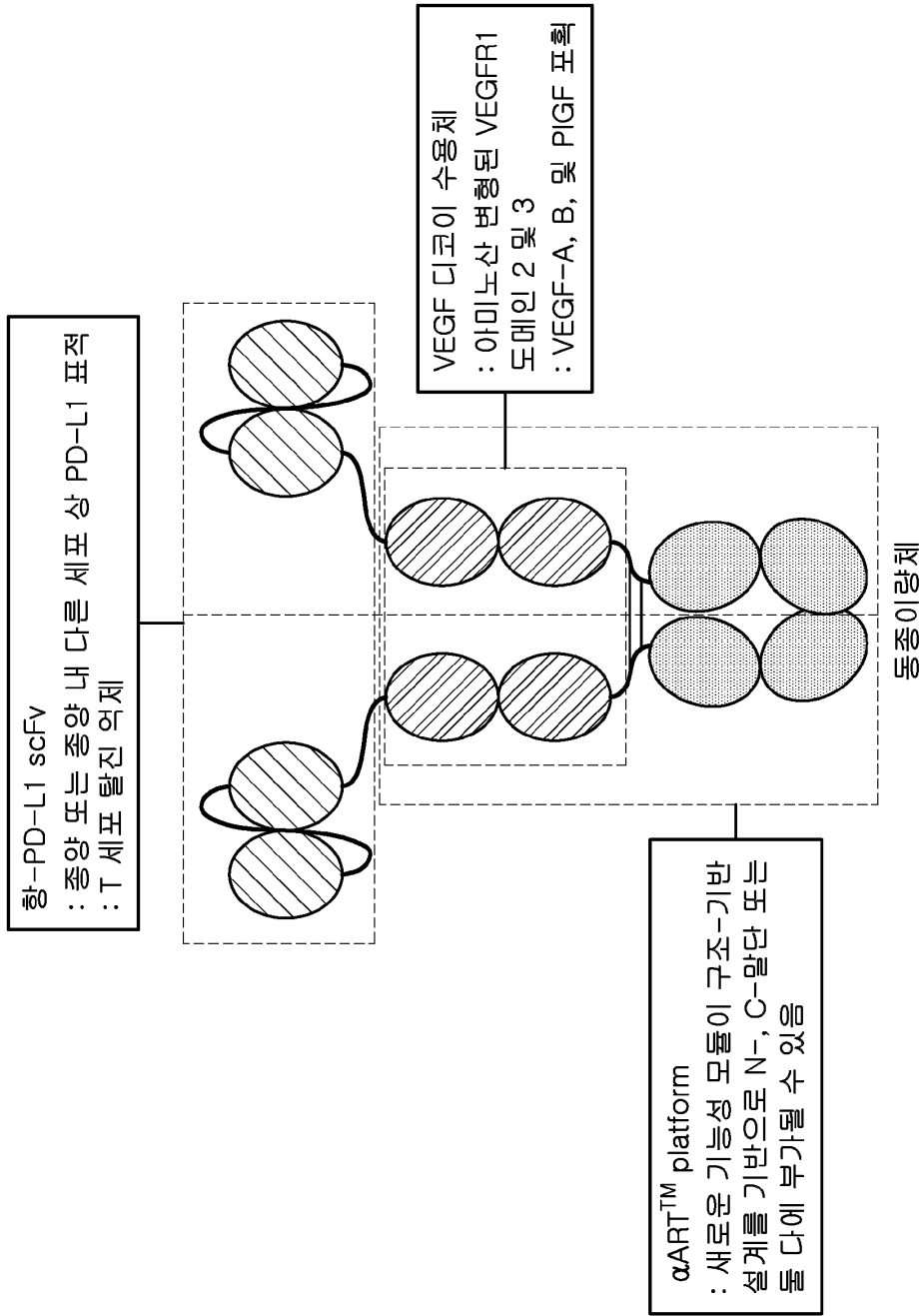


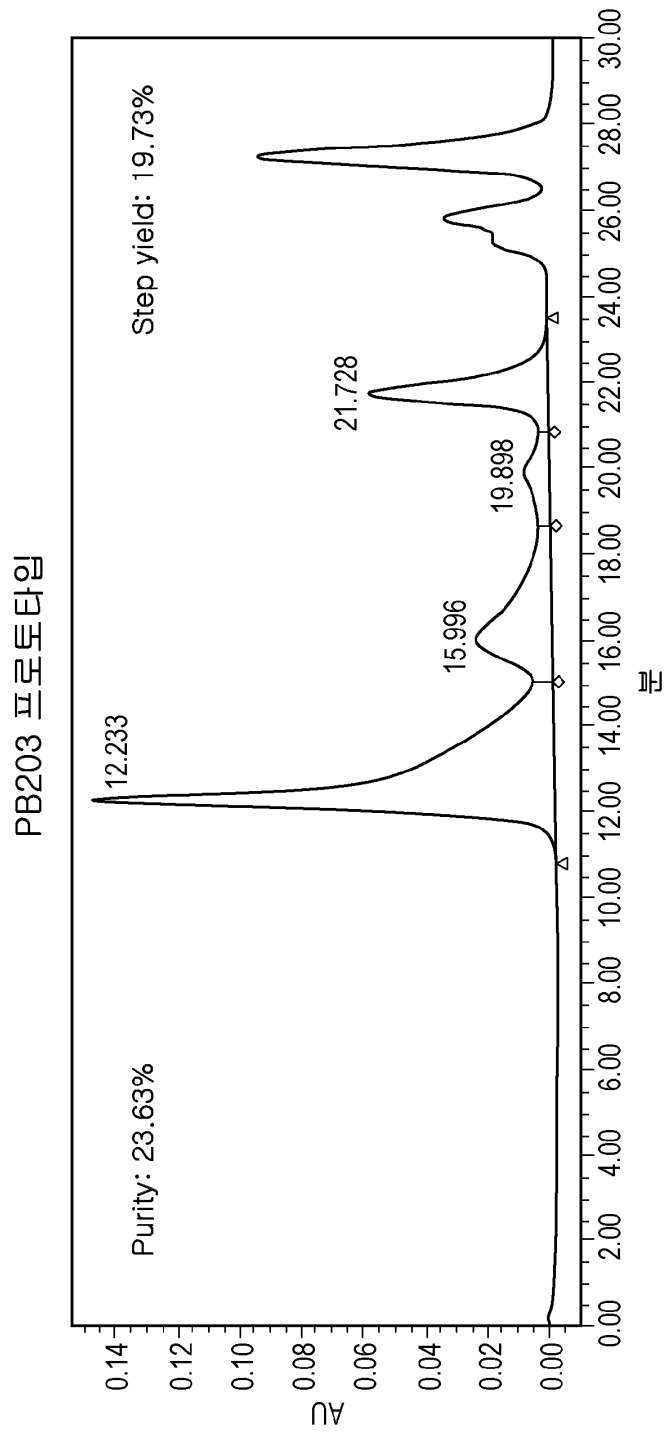
[도1]



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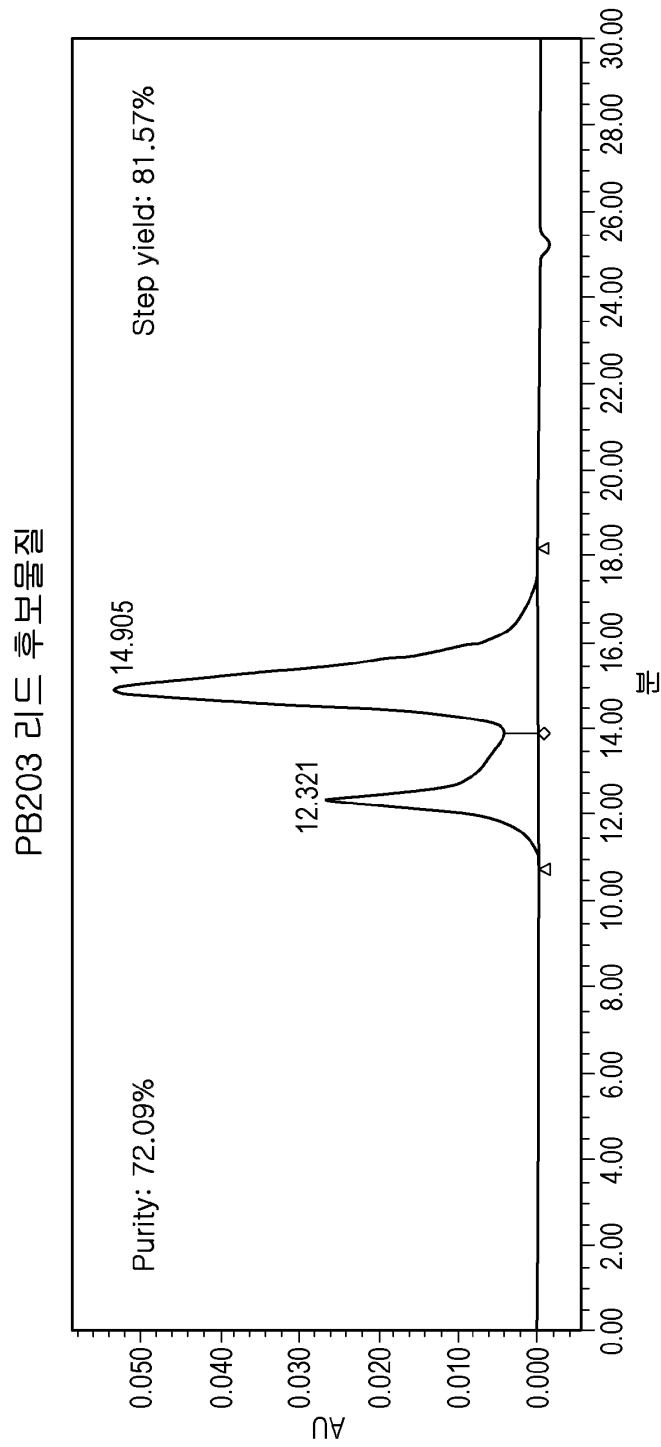
[도2a]



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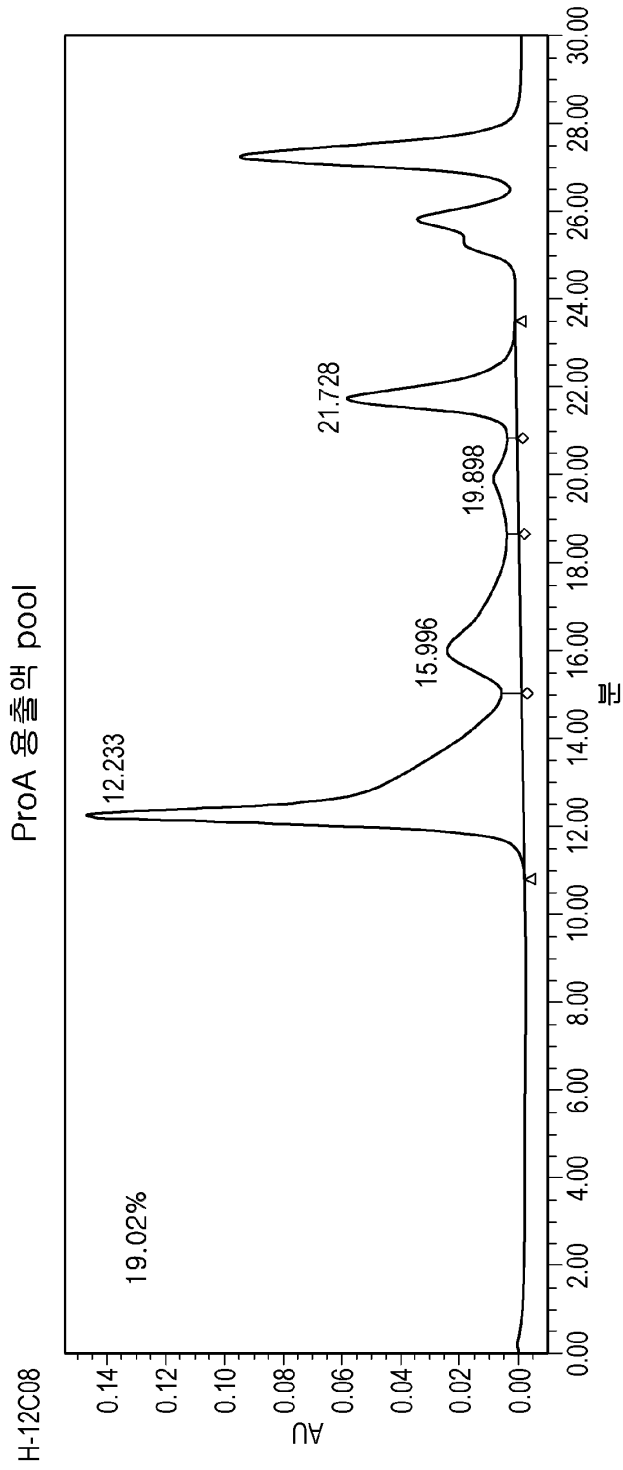
[도2b]



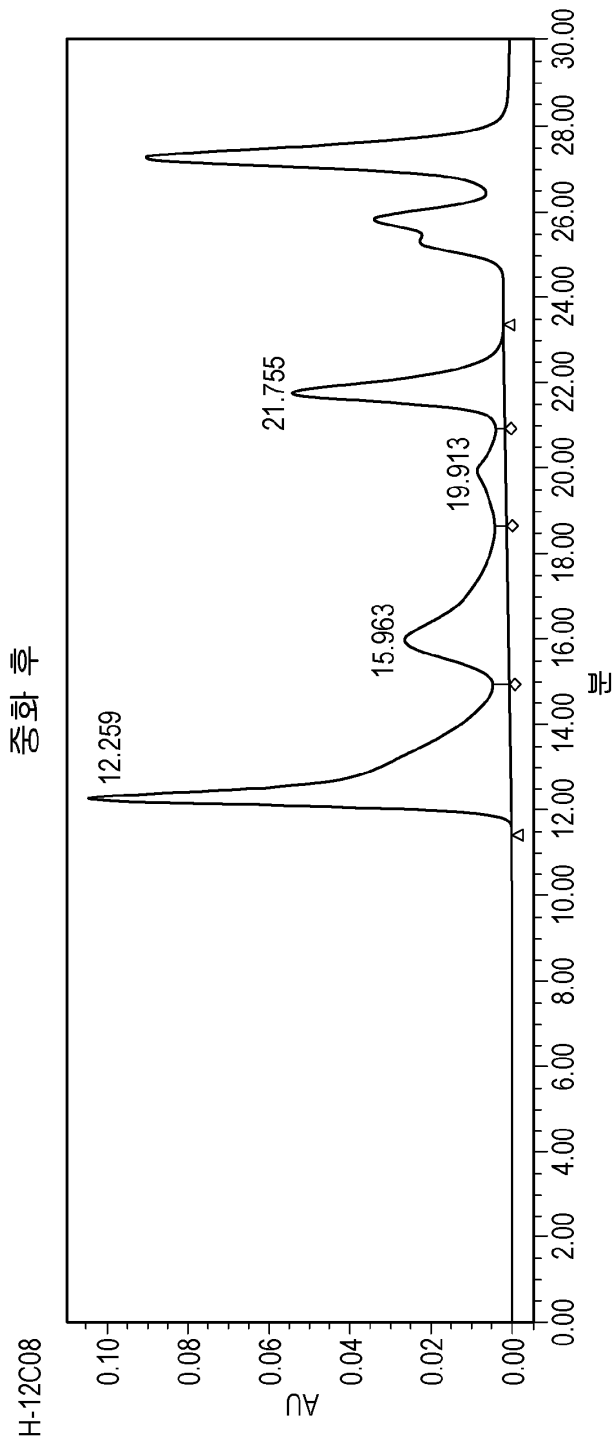
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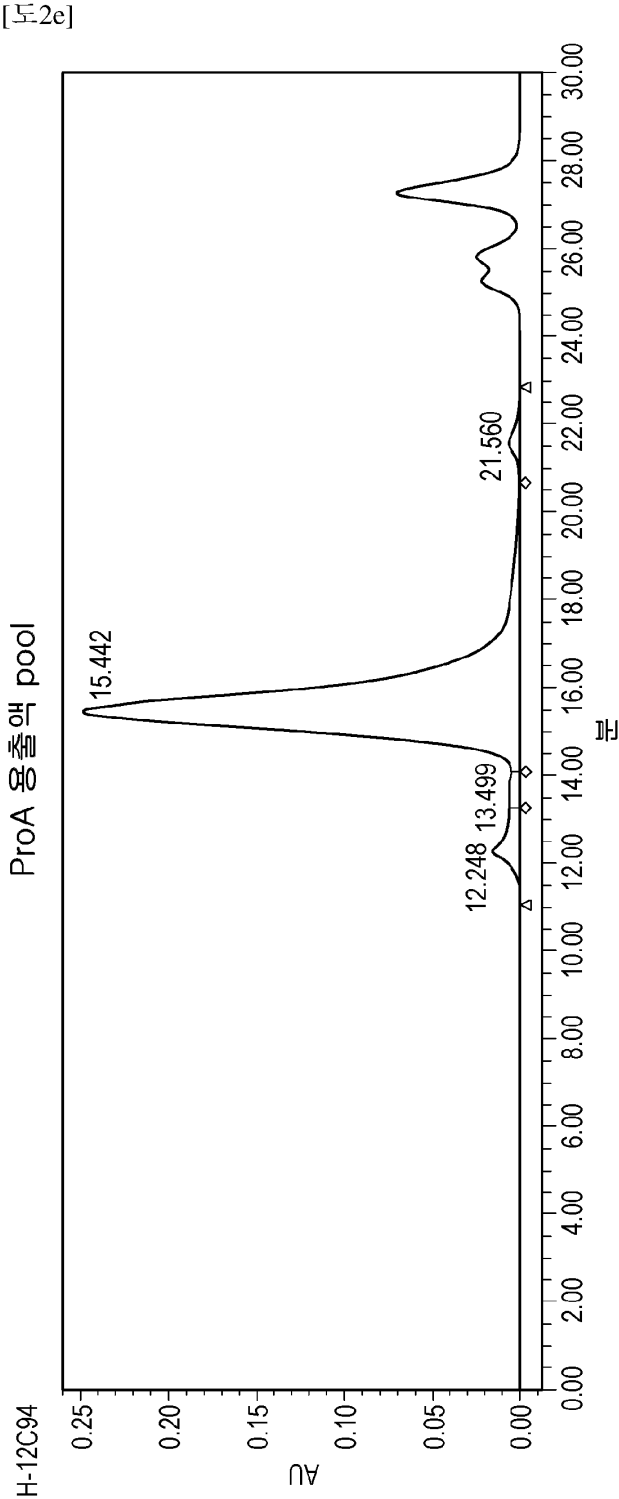
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[도 2c]



[도2d]

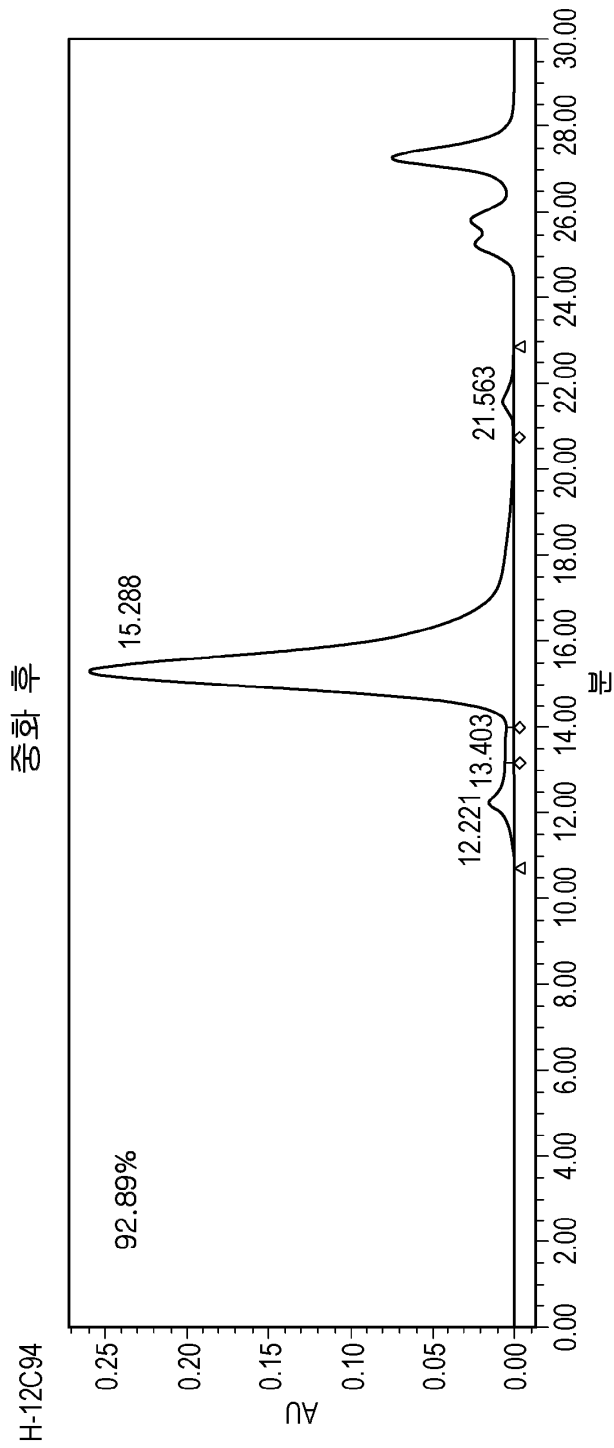




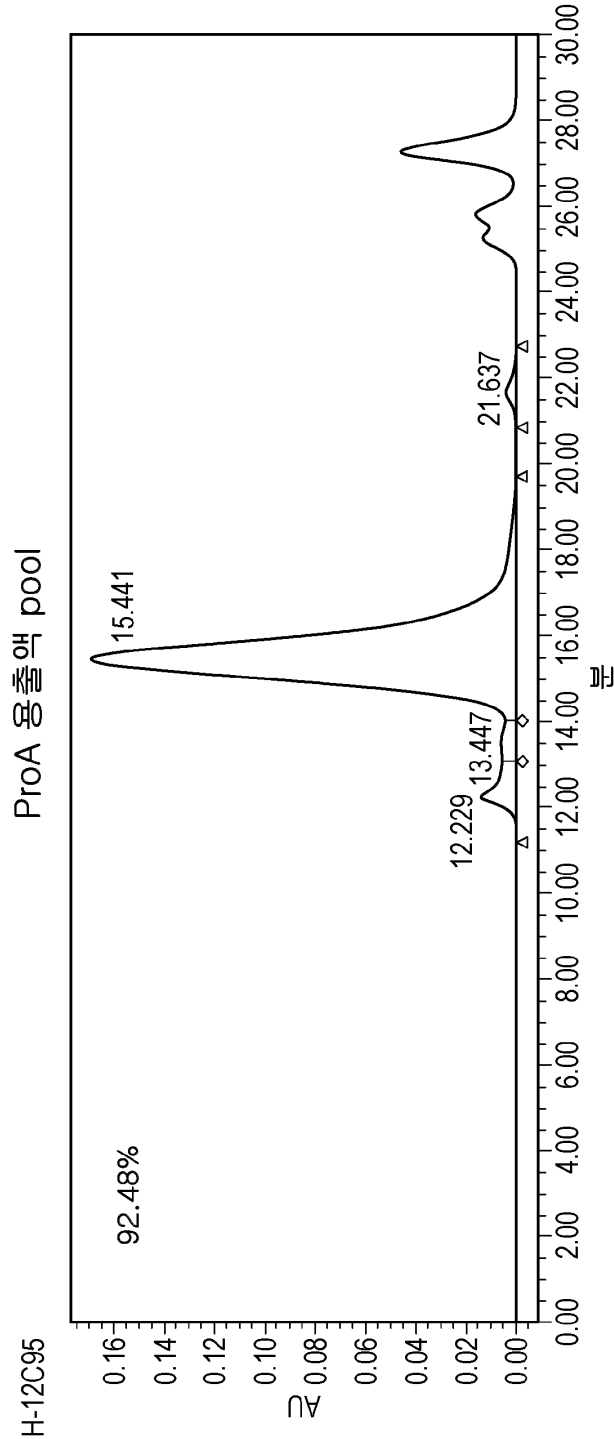
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[도 2f]



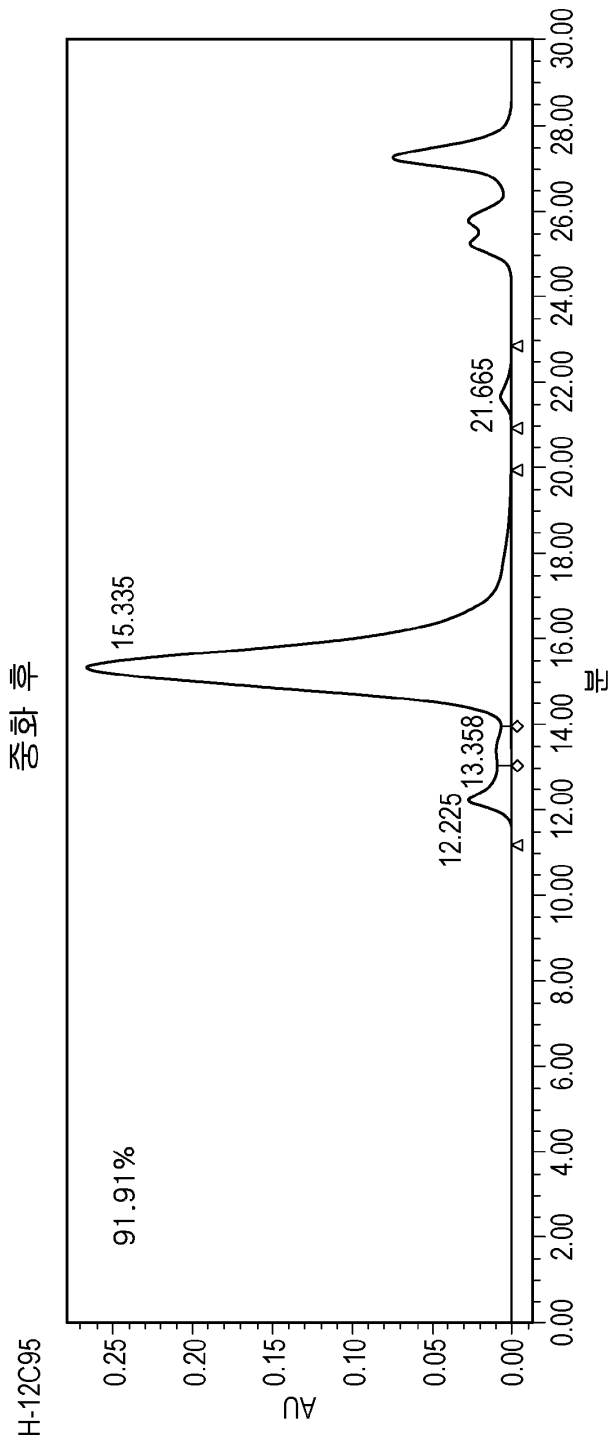
[도 2g]



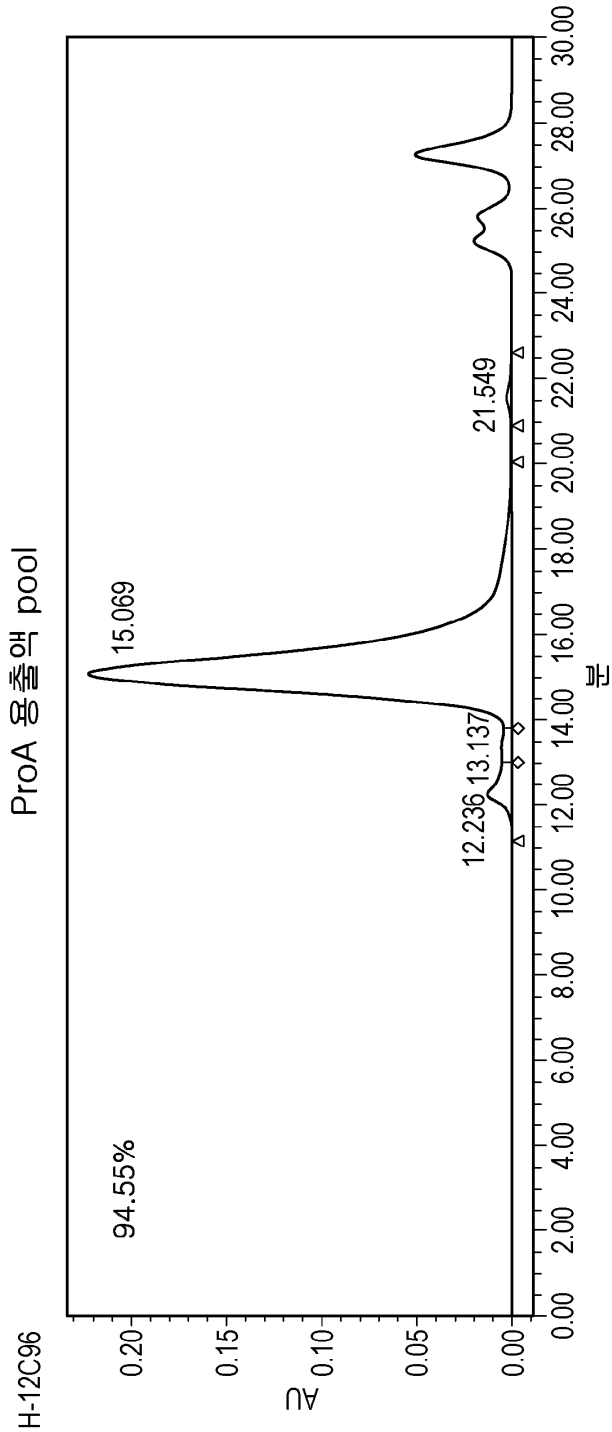
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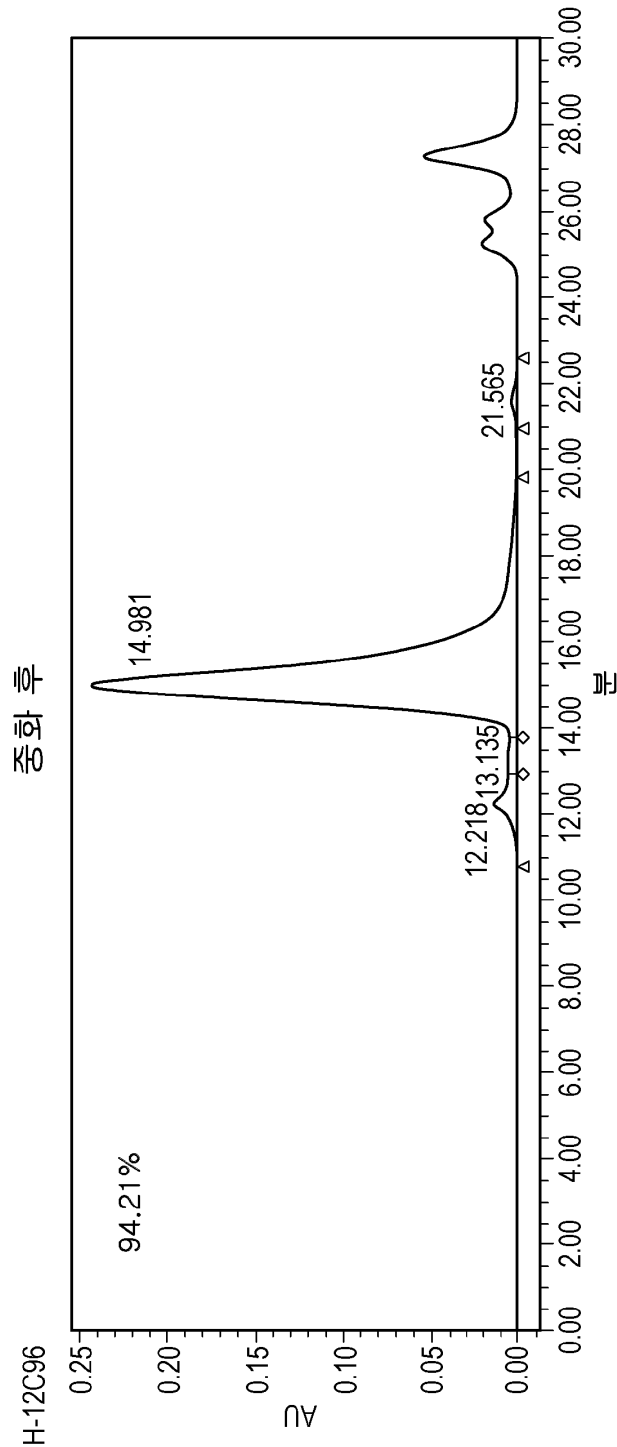
[도 2h]



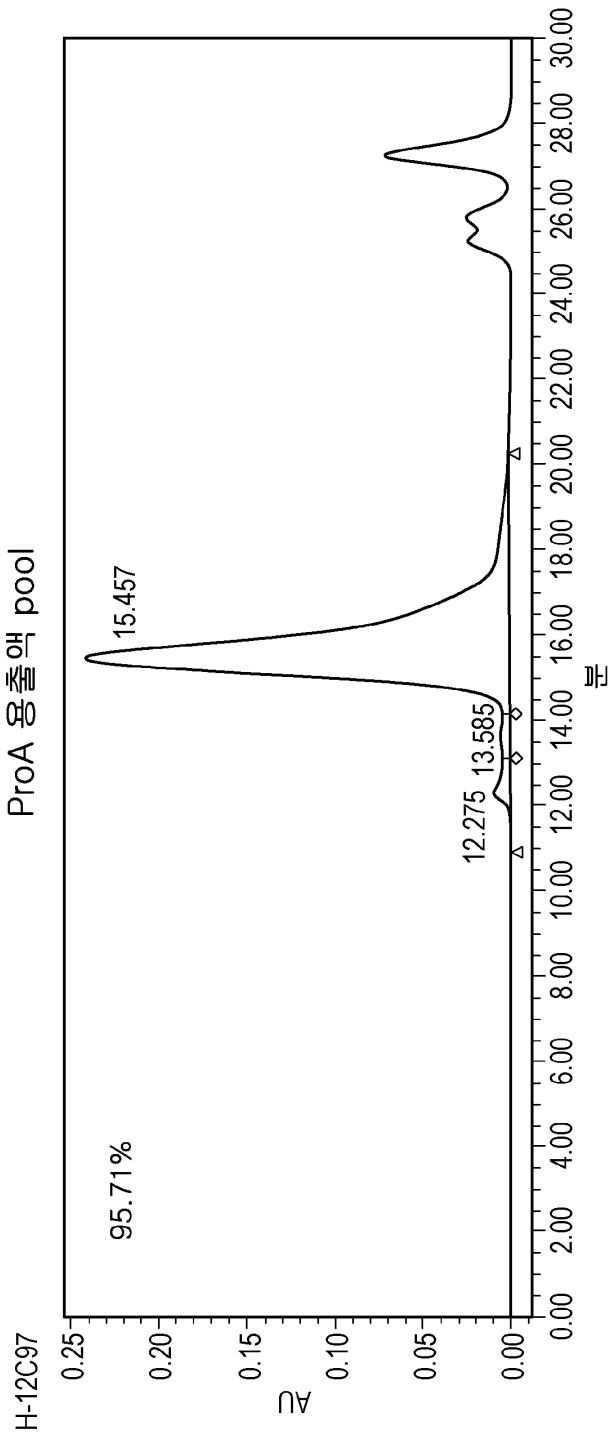
[도2i]



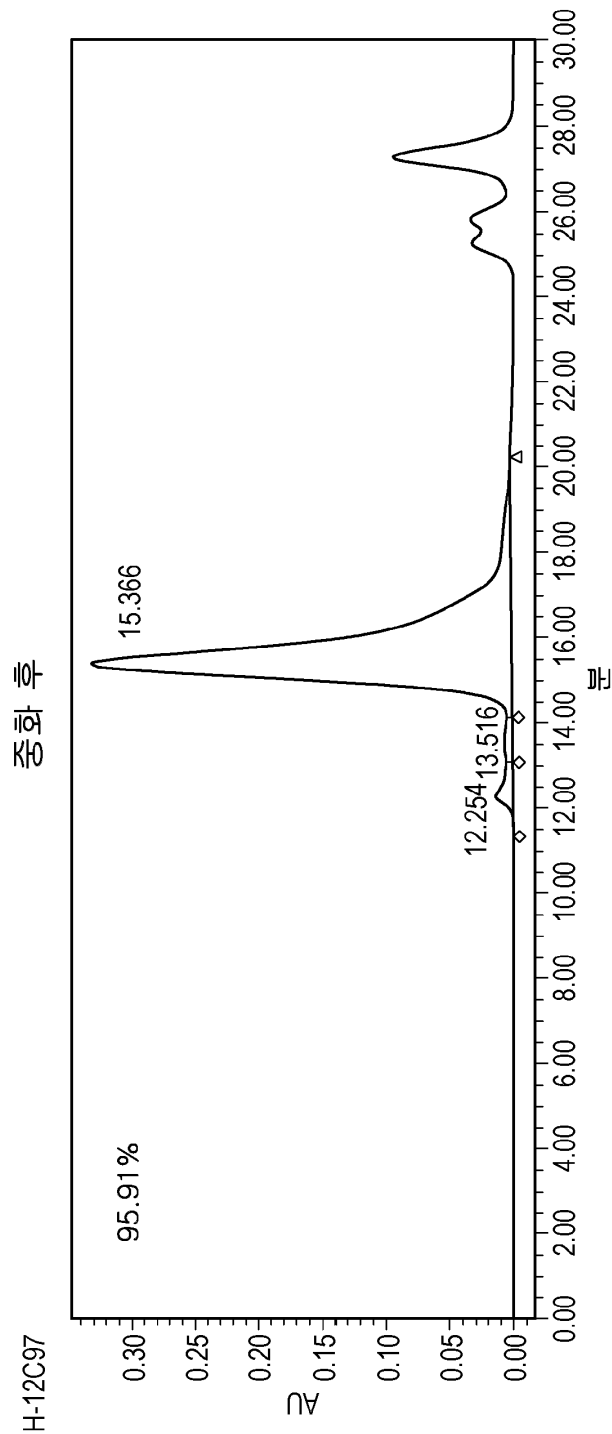
[도2]



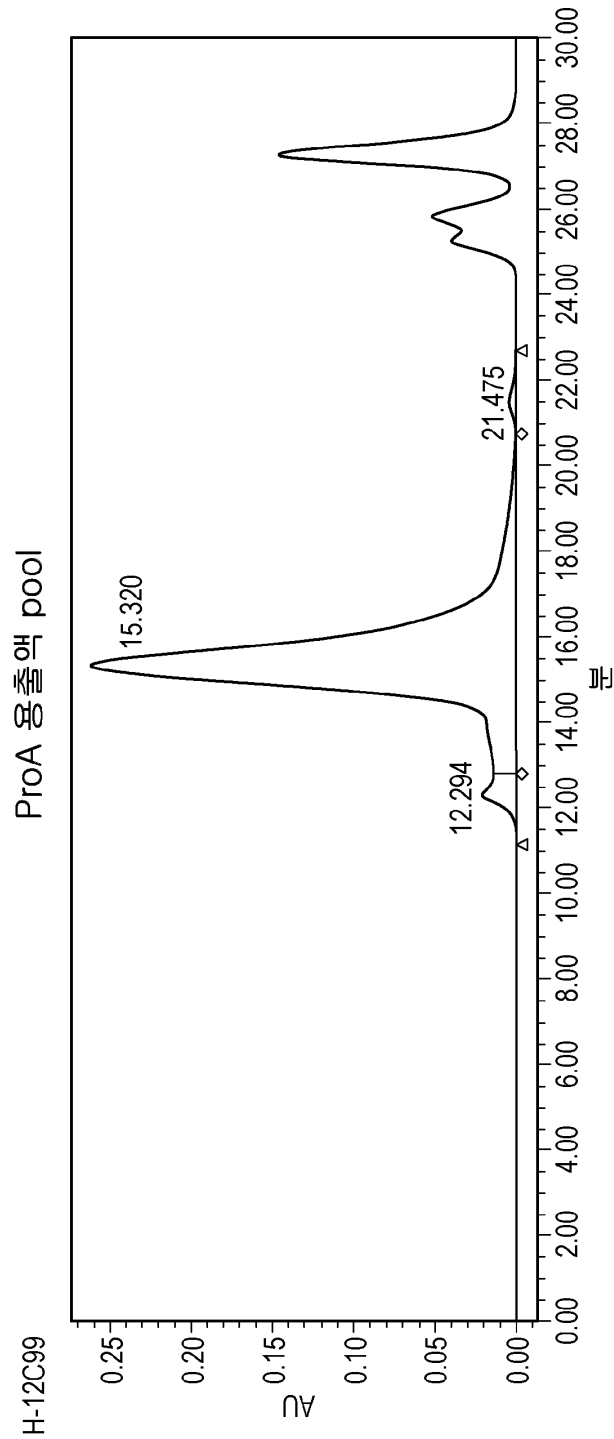
[도2k]



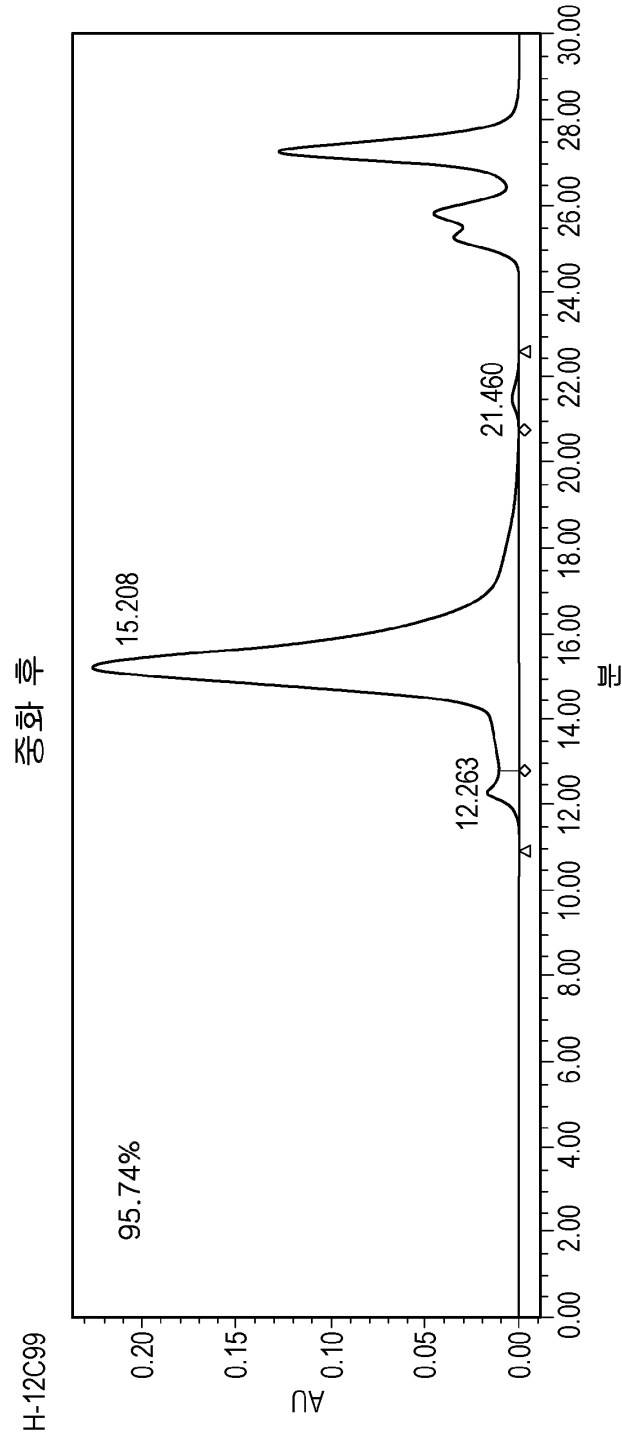
[도 21]



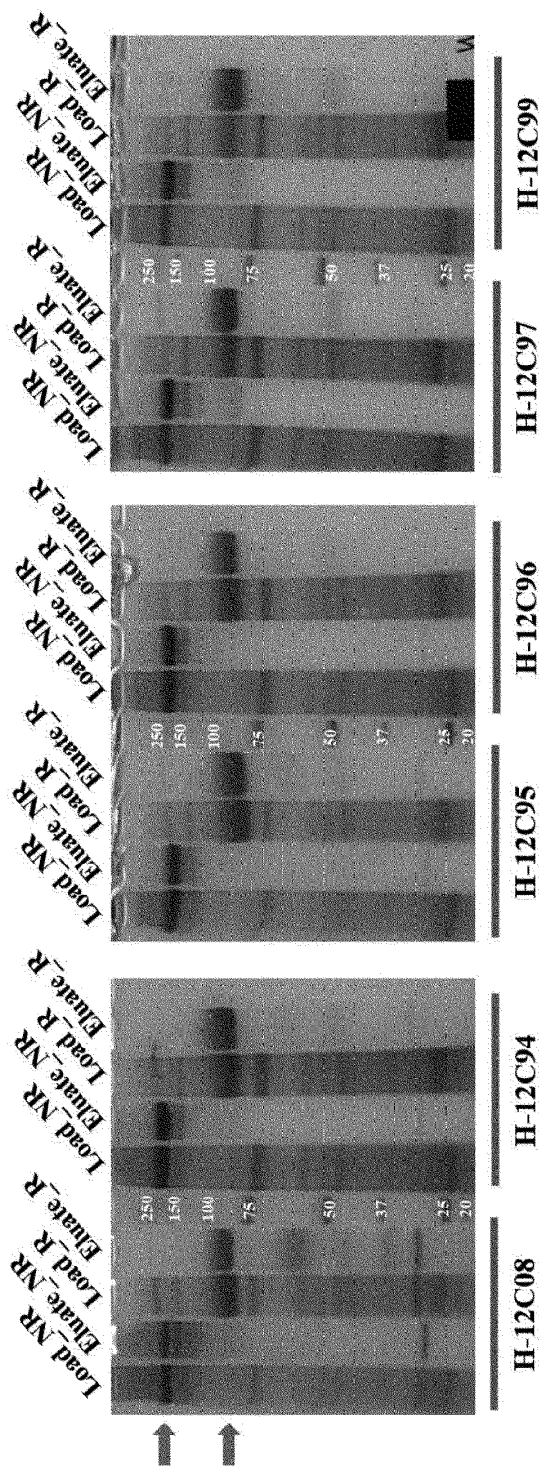
[도2m]



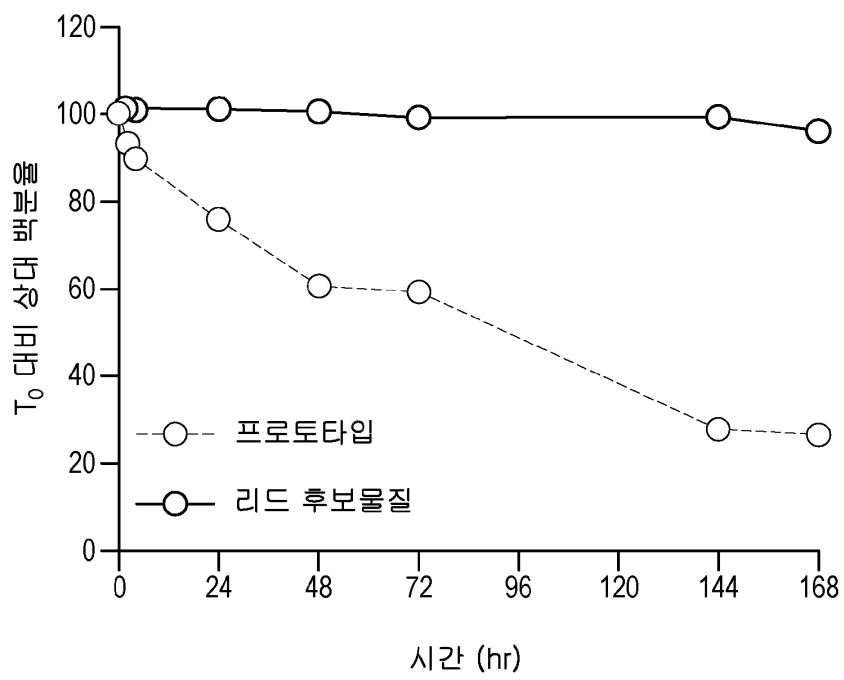
[도 2n]



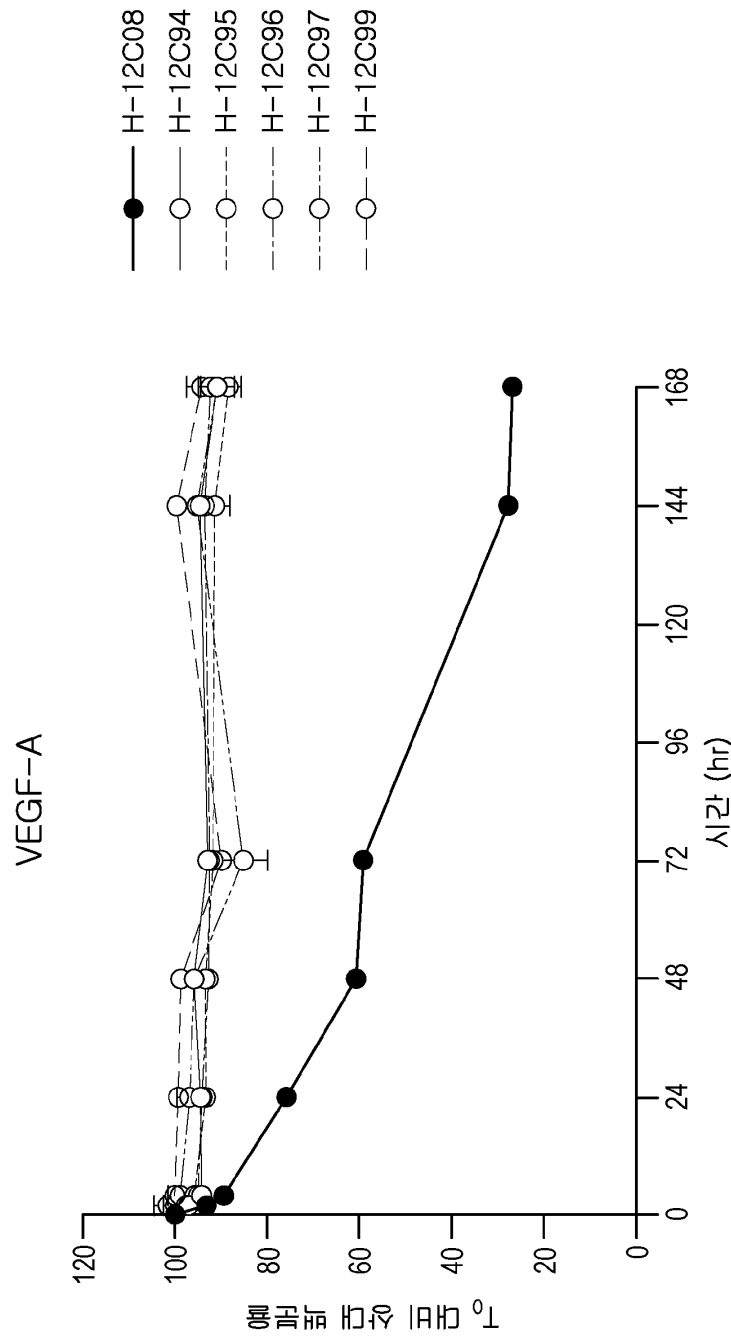
[Figure 20]



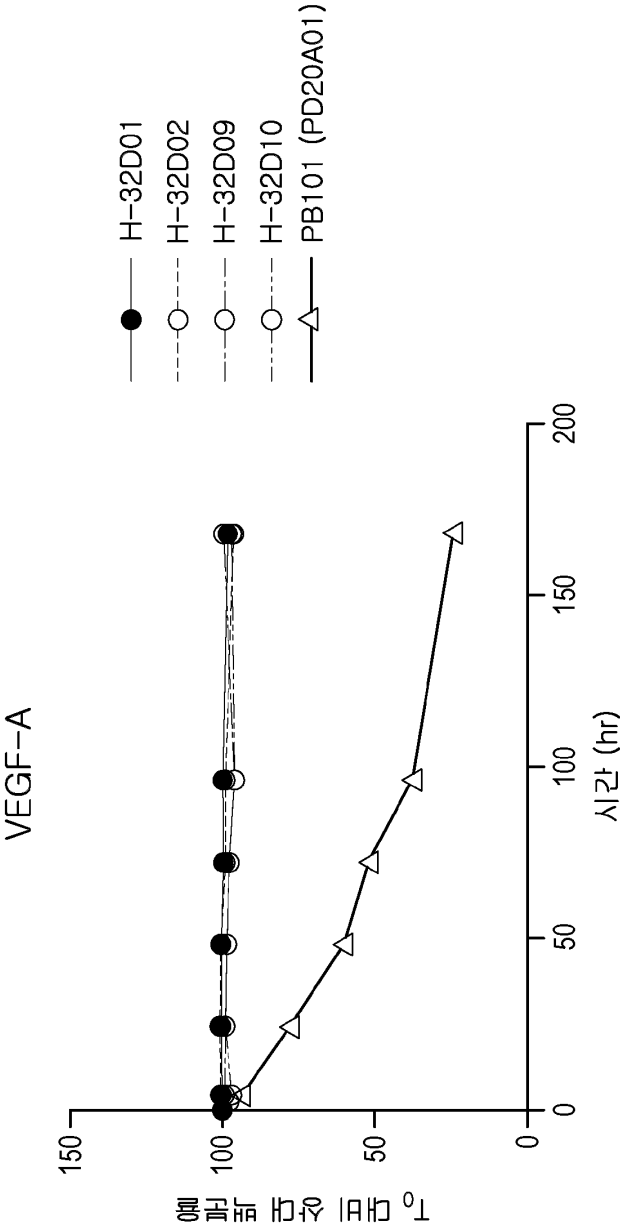
[도3a]



[도3b]

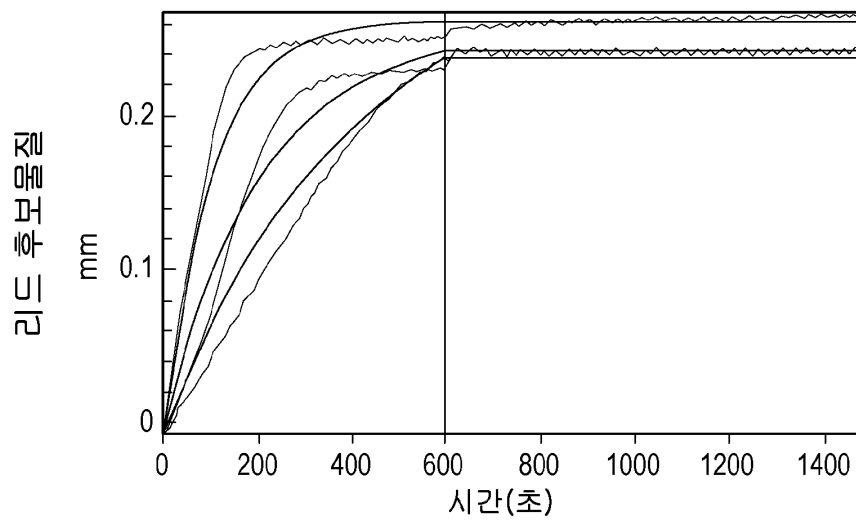
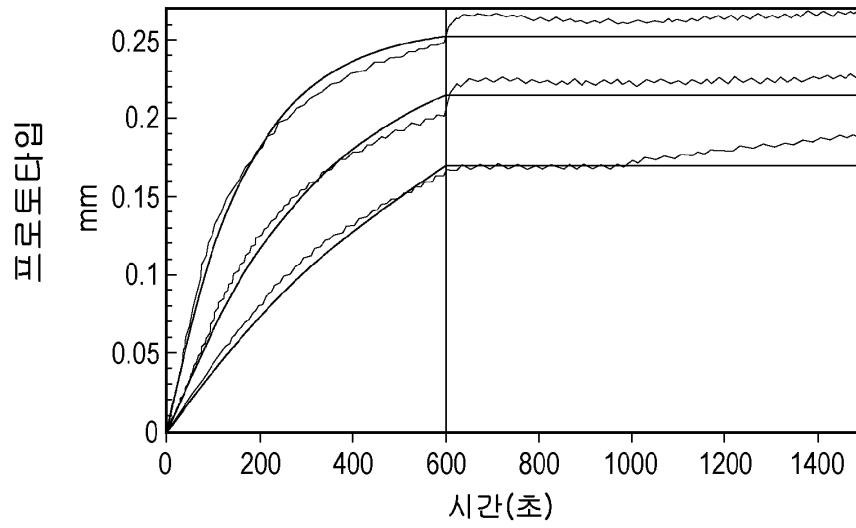


[도3c]

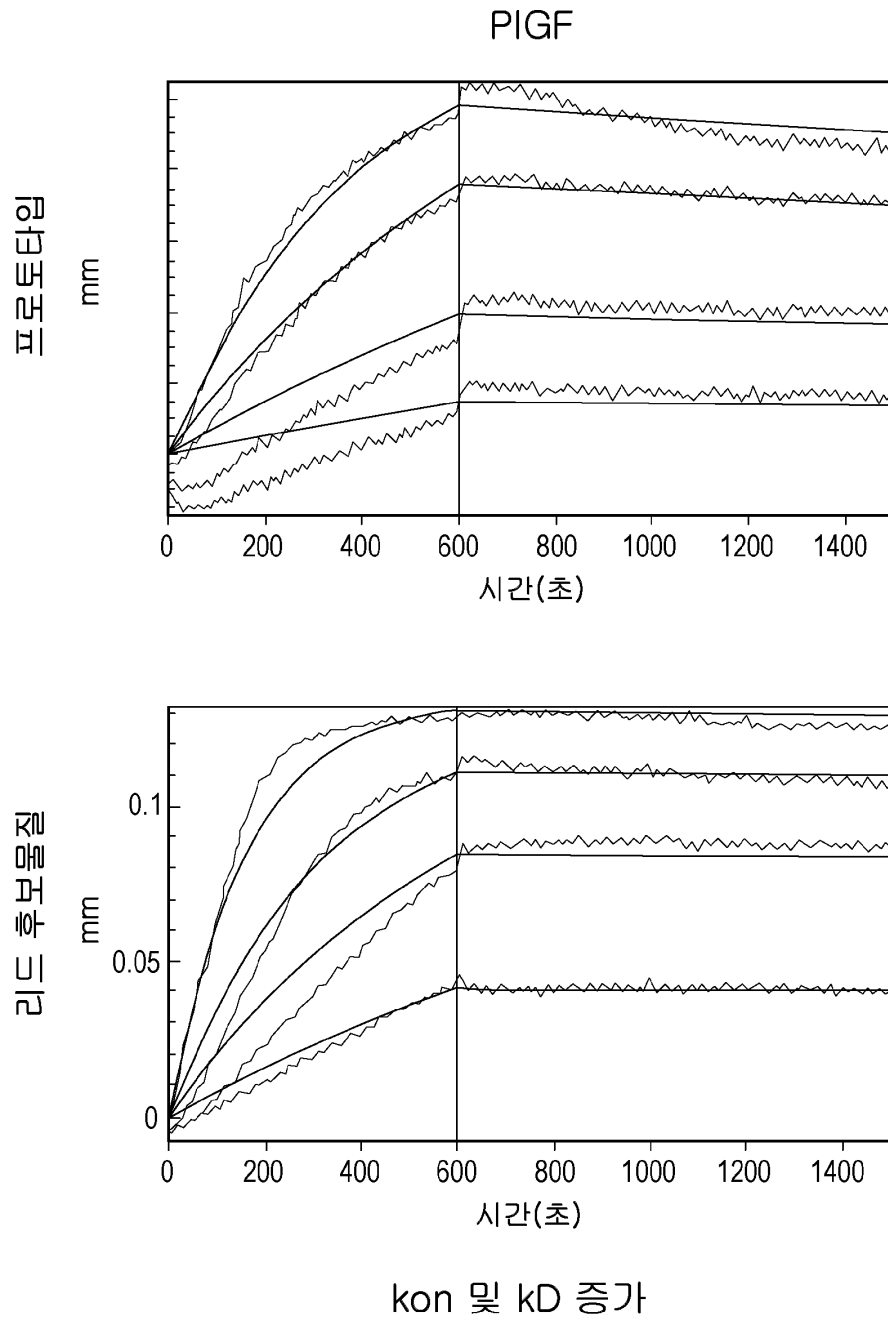


[도4a]

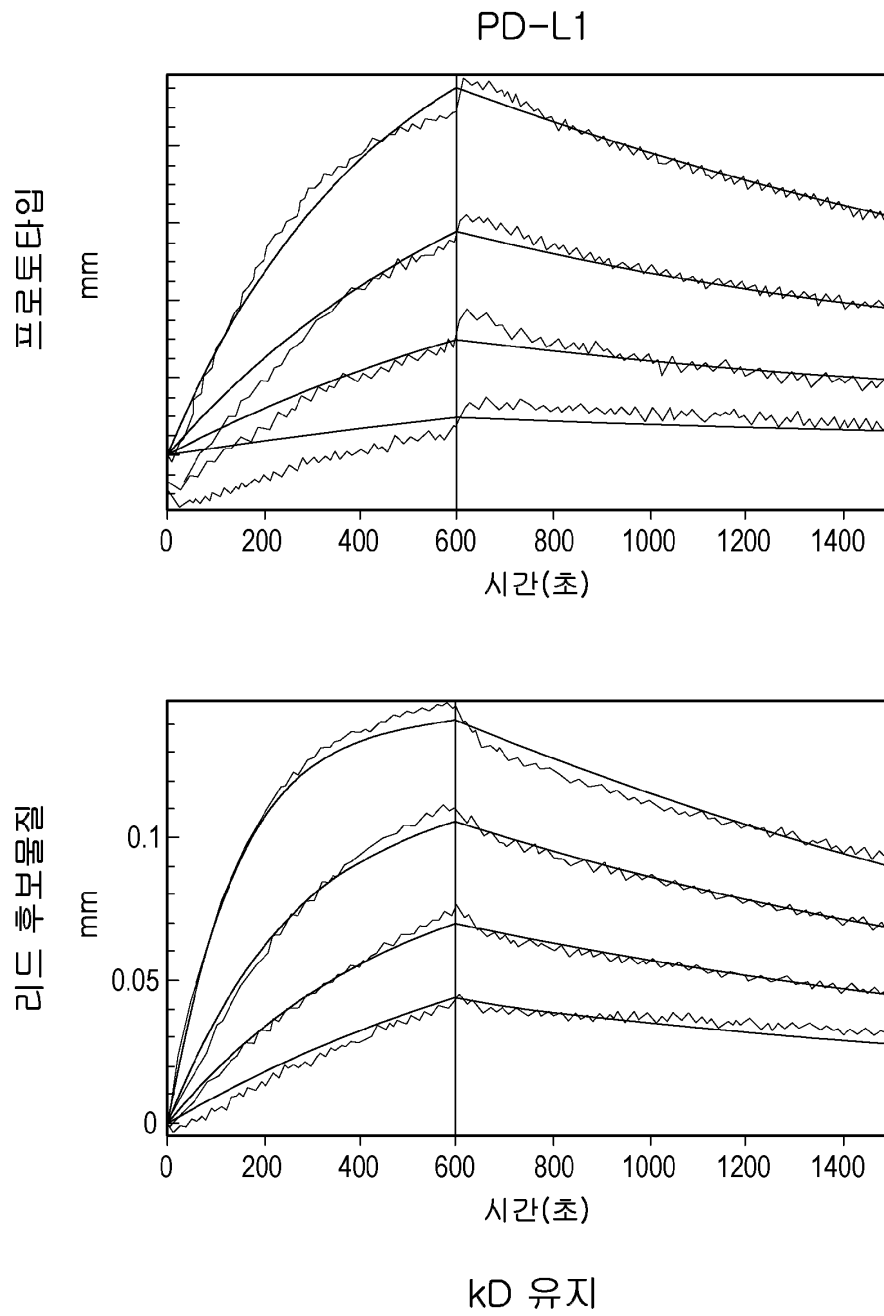
VEGF-A



[도4b]



[도4c]



[도4d]

VEGF-A

	KD (M)	kon(1/Ms)	kdis(1/s)	Full X^2	Full R^2
H-12C08	1.00E-12	6.72E+05	1.00E-07	0.0843	0.9798
H-12C95	7.14E-12	9.19E+05	5.69E-06	0.0669	0.9798
H-12C94	2.16E-11	6.99E+05	1.75E-05	0.1182	0.9861
H-12C96	2.40E-11	7.67E+05	1.19E-05	0.0895	0.9751
H-12C99	2.61E-11	1.18E+06	2.90E-05	0.0282	0.9915
H-12C97	3.79E-11	1.22E+06	4.39E-05	0.0171	0.9940

[도4e]

PIGF

	KD (M)	kon(1/Ms)	kdis(1/s)	Full X^2	Full R^2
H-12C08	8.78E-11	1.05E+06	9.73E-05	2.55E-02	9.89E-01
H-12C95	9.30E-11	1.61E+06	1.57E-04	2.55E-02	9.73E-01
H-12C96	1.53E-10	1.78E+06	2.64E-04	3.00E-02	9.58E-01
H-12C97	1.79E-10	1.87E+06	3.26E-04	1.96E-02	9.76E-01
H-12C99	1.82E-10	2.00E+06	3.55E-04	5.75E-02	9.25E-01
H-12C94	2.21E-10	1.23E+06	2.45E-04	7.75E-02	9.65E-01

[도4f]

PD-L1

	KD (M)	kon(1/Ms)	kdis(1/s)	Full X^2	Full R^2
H-12C08	6.58E-10	1.08E+06	7.14E-04	0.0212	0.9910
H-12C95	8.39E-10	9.06E+05	7.66E-04	0.0251	0.9886
H-12C96	8.51E-10	9.90E+05	8.43E-04	0.0251	0.9854
H-12C99	8.79E-10	9.69E+05	8.52E-04	0.0128	0.9930
H-12C94	9.51E-10	8.99E+05	8.55E-04	0.0187	0.9960
H-12C97	1.00E-09	1.06E+06	1.06E-03	0.0148	0.9938

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[도4g]

로딩 샘플 ID	KD (M)	kon(1/Ms)	kdis(1/s)	Full X ²	Full R ²
H-32D01	<1.0E-12	1.01E+06	<1.0E-07	0.335	0.9802
H-32D02	<1.0E-12	9.70E+05	<1.0E-07	0.4793	0.9728
H-32D09	<1.0E-12	9.07E+05	<1.0E-07	0.2889	0.9834
H-32D10	<1.0E-12	9.02E+05	<1.0E-07	0.3736	0.9799
PB101 (DP)	<1.0E-12	6.50E+05	<1.0E-07	0.9929	0.9671

[도4h]

코드명	KD (M)	kon(1/Ms)	kdis(1/s)	Full X ²	Full R ²
H-32D01	1.18E-10	2.06E+06	2.43E-04	0.1426	0.9837
H-32D02	8.08E-11	9.07E+05	7.32E-05	0.5452	0.9563
H-32D09	6.47E-11	1.41E+06	9.09E-05	0.2435	0.9776
H-32D10	<1.0E-12	4.00E+06	<1.0E-07	2.384	0.8278
PB101 DP	1.69E-10	1.12E+06	1.89E-04	0.2627	0.9818

[도4i]

코드	KD (M)	kon(1/Ms)	kdis(1/s)	Full X ²	Full R ²
H-32D01	8.73E-10	6.07E+05	5.30E-04	0.0866	0.9959
H-32D02	1.39E-09	5.51E+05	7.64E-04	0.2048	0.9875
A167 scFv	1.04E-09	5.65E+05	2.27E-06	0.2297	0.9922
H-32D09	6.29E-10	5.10E+05	3.21E-04	0.0783	0.9959
H-32D10	7.54E-10	4.65E+05	3.51E-04	0.122	0.9928
아테졸리주맵 scFv	4.70E-10	4.92E+05	2.31E-04	0.0692	0.9981

[도4j]

샘플 ID	로딩 샘플 ID	KD (M)	kon(1/Ms)	kdis(1/s)	Full X^2	Full R^2
hVEGF-A	H-01C65	<1.0E-12	9.39E+05	<1.0E-07	0.2154	0.9887
	PD20A01	<1.0E-12	1.18E+06	<1.0E-07	0.0461	0.9961
	H-32D02	<1.0E-12	5.95E+05	<1.0E-07	0.467	0.9844
	H-32D04	<1.0E-12	9.43E+05	<1.0E-07	0.4766	0.9724
	H-32D06	2.52E-11	8.55E+05	2.15E-05	0.2382	0.9851
	H-32D08	1.26E-11	1.00E+06	1.26E-05	0.2177	0.9841

[도4k]

샘플 ID	로딩 샘플 ID	KD (M)	kon(1/Ms)	kdis(1/s)	Full X^2	Full R^2
PlGF	H-01C65	<1.0E-12	1.76E+06	<1.0E-07	0.2048	0.9807
	PB101	2.07E-10	1.08E+06	2.23E-04	0.1203	0.9877
	H-32D02	1.21E-11	1.24E+06	1.50E-05	0.1819	0.982
	H-32D04	5.62E-11	1.40E+06	7.87E-05	0.103	0.985
	H-32D06	6.42E-12	1.68E+06	1.08E-05	0.1448	0.9755
	H-32D08	8.05E-11	1.91E+06	1.54E-04	0.2179	0.9563

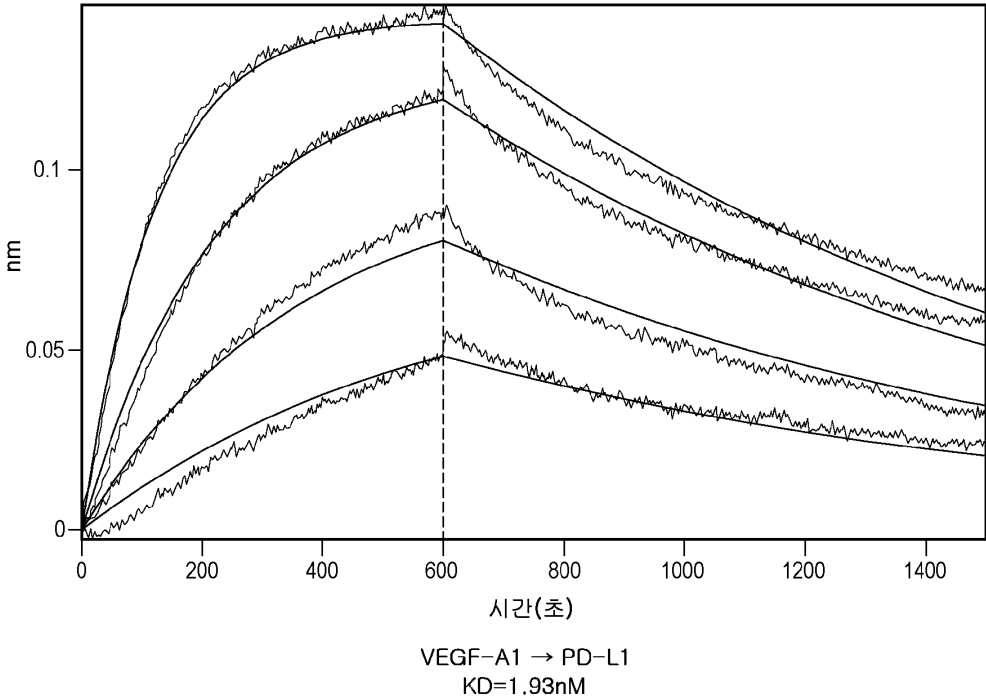
[도5a]

샘플	1차	2차	KD (M)	Kon (1/Ms)	Kdis (1/s)	Full X^2	Full R^2	랭킹
H-32D02	VEGF-A	PD-L1	1.93E-09	4.87E+05	9.41E-04	0.0789	0.9897	H-32D02
H-32D04			3.40E-09	4.72E+05	1.60E-03	0.1196	0.9684	H-32D04
H-32D06			7.79E-09	3.12E+05	2.43E-03	0.0626	0.9705	H-32D08
H-32D08			4.79E-09	4.69E+05	2.25E-03	0.0621	0.9727	H-32D06

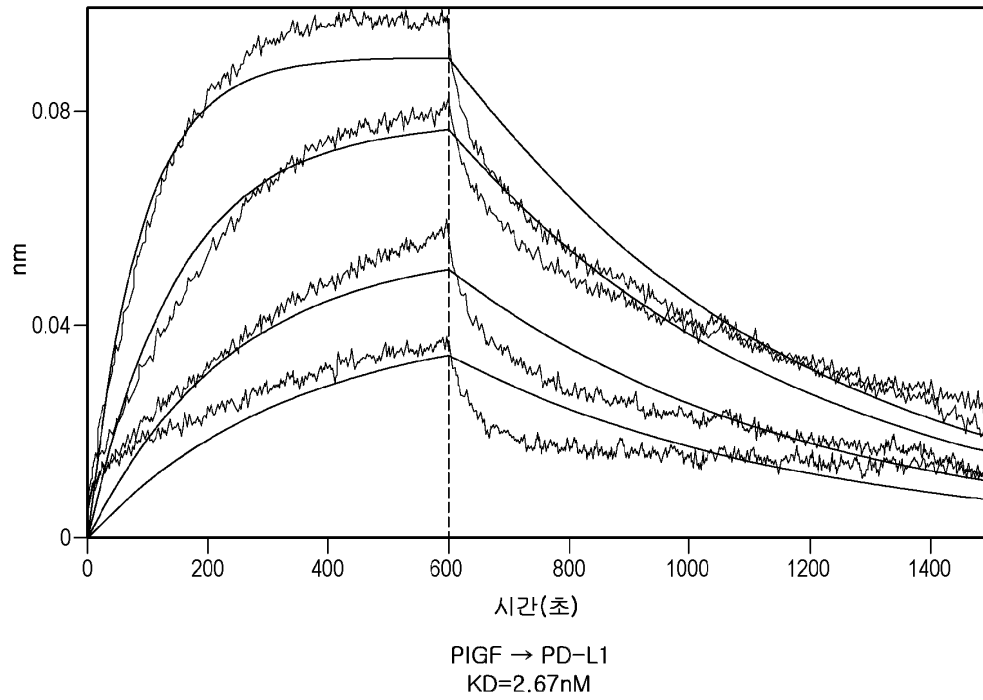
[도5b]

샘플	1st	2nd	KD (M)	Kon (1/Ms)	Kdis (1/s)	Full X^2	Full R^2	랭킹
H-32D02	PIGF	PD-L1	2.67E-09	6.51E+05	1.74E-03	0.1626	0.9498	H-32D02
H-32D04			7.18E-09	3.19E+05	2.29E-03	0.055	0.9784	H-32D08
H-32D06			8.80E-09	3.89E+05	3.42E-03	0.1133	0.9584	H-32D04
H-32D08			4.26E-09	5.04E+05	2.15E-03	0.1042	0.945	H-32D06

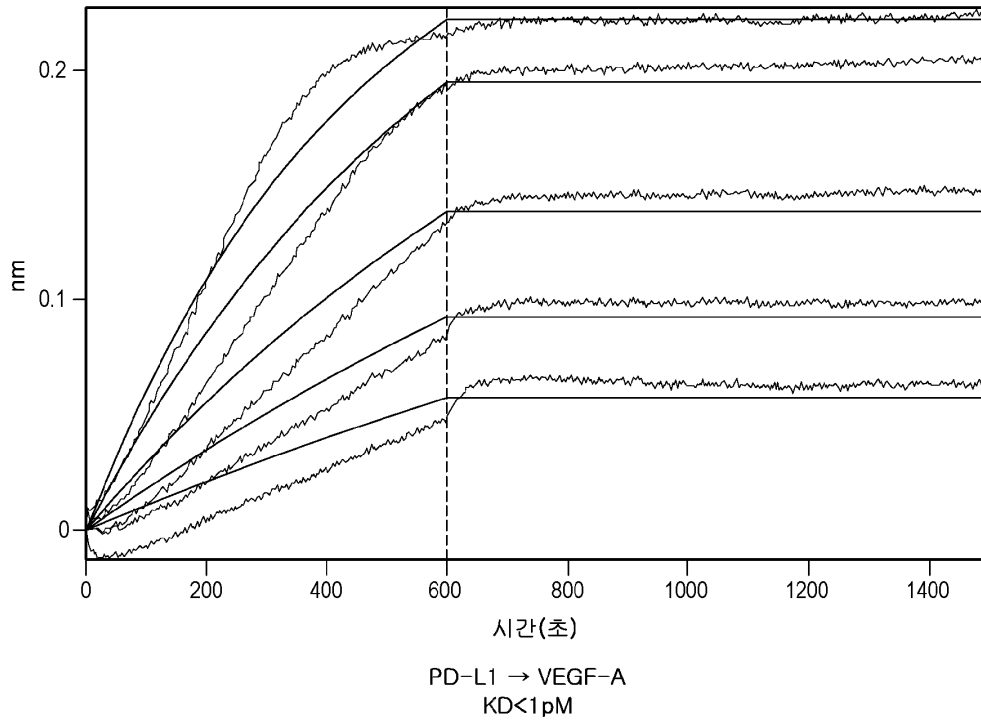
[도5c]



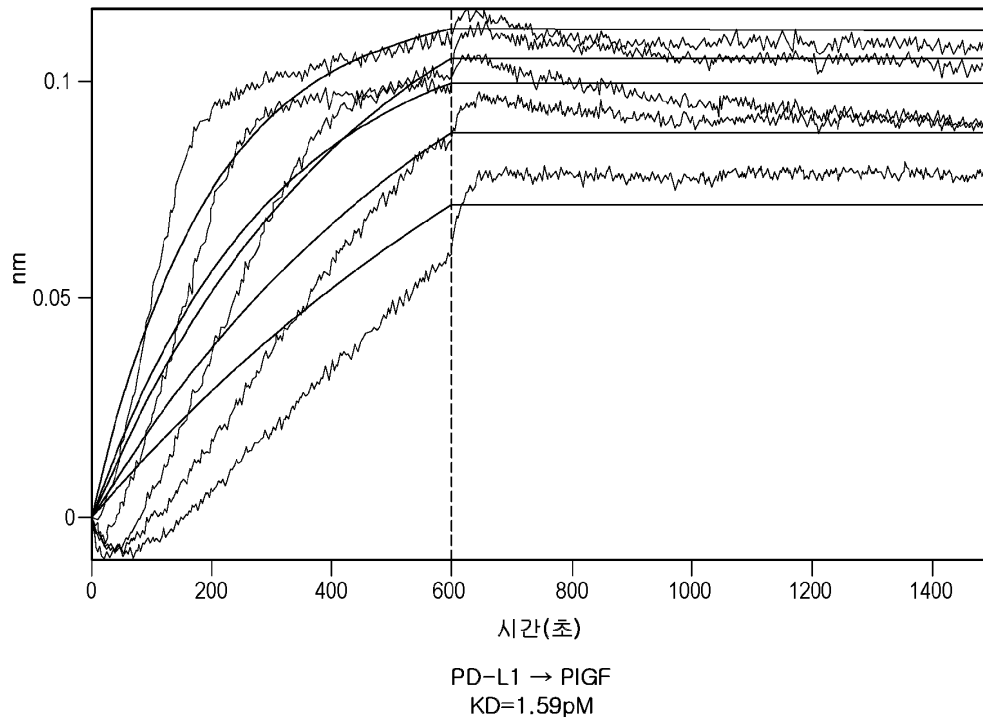
[도5d]



[도5e]

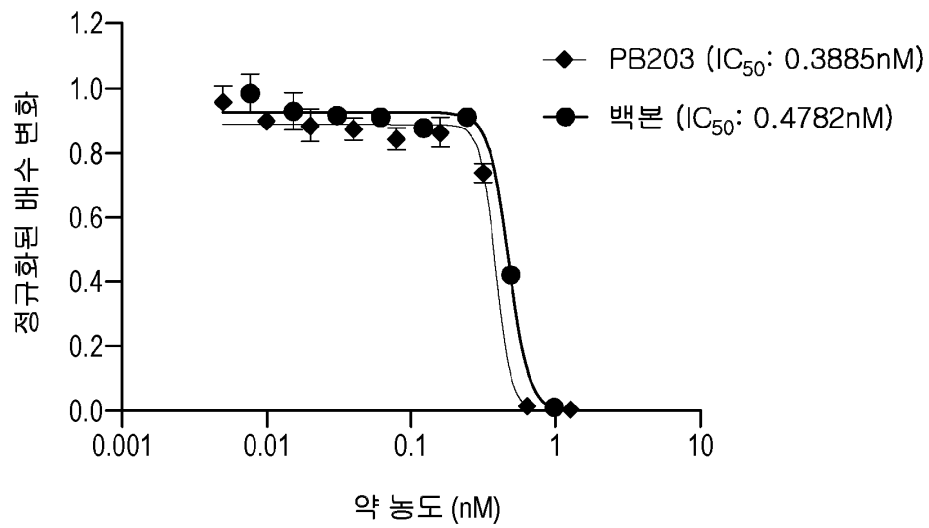


[도5f]

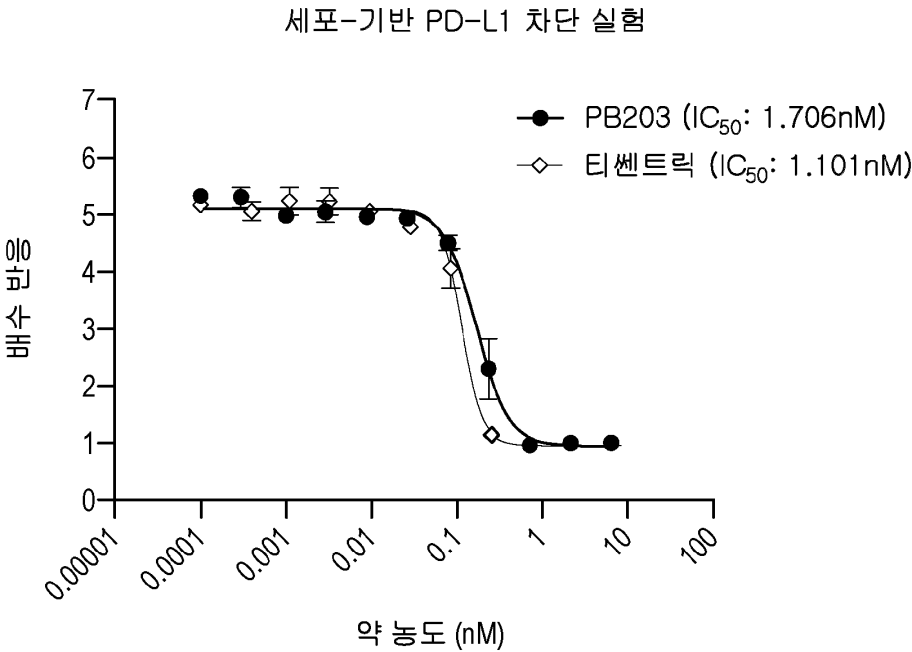


[도6a]

세포-기반 VEGF-A 차단 실험



[도6b]

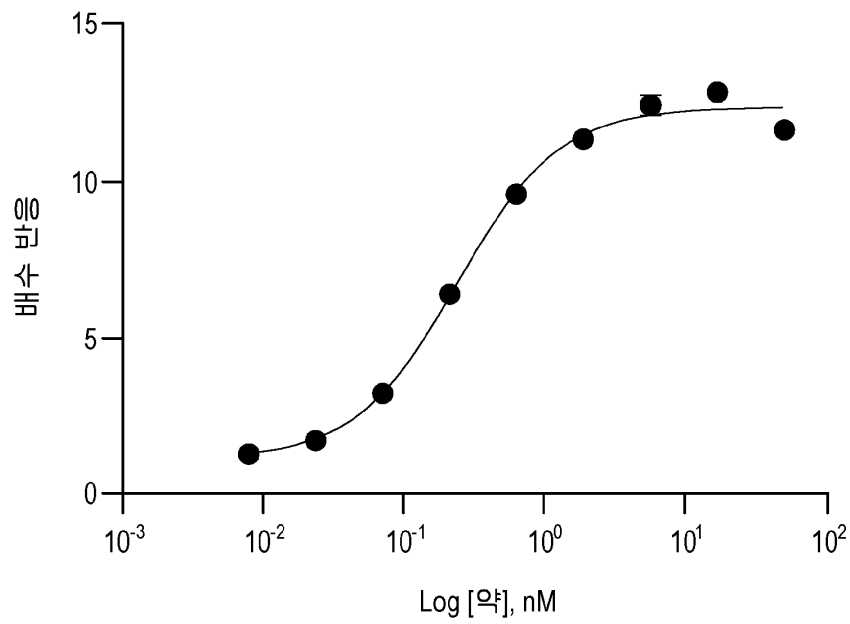


[도6c]

[억제제] vs. 반응 - 다중 슬로프 (4 파라미터)					
최적-적합 값	PB101	H-32D01	H-32D02	H-32D09	H-32D10
IC50	0.6243	0.1732	0.3848	0.3656	0.3821

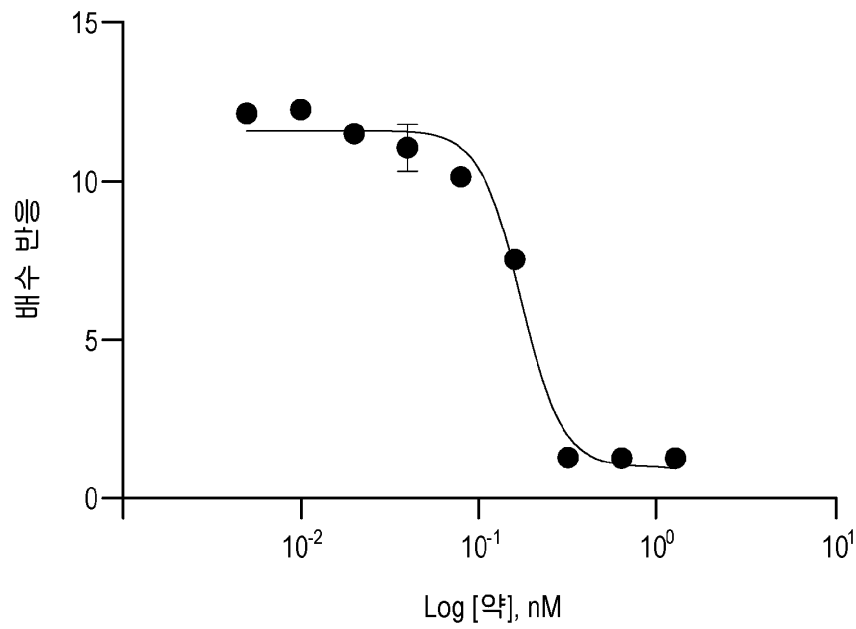
[도6d]

VEGF-A 자극



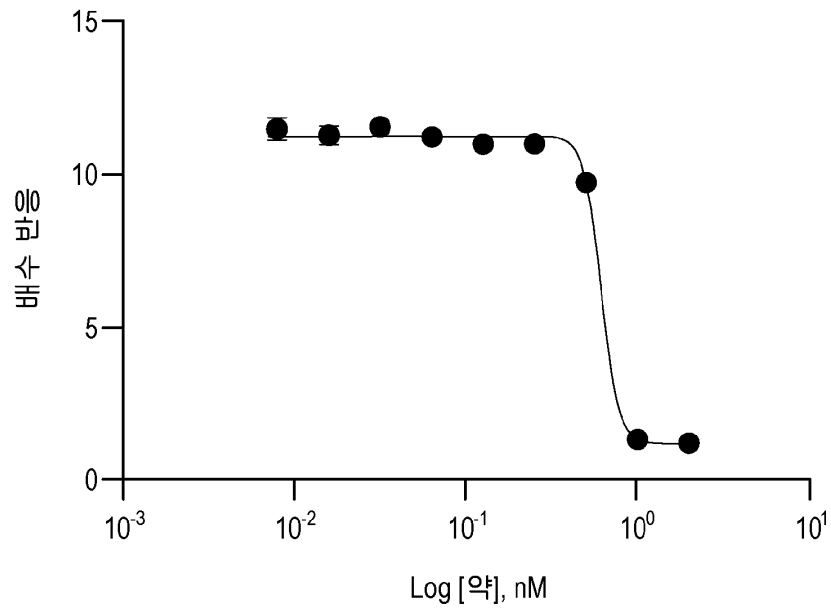
[도6e]

H-32D09



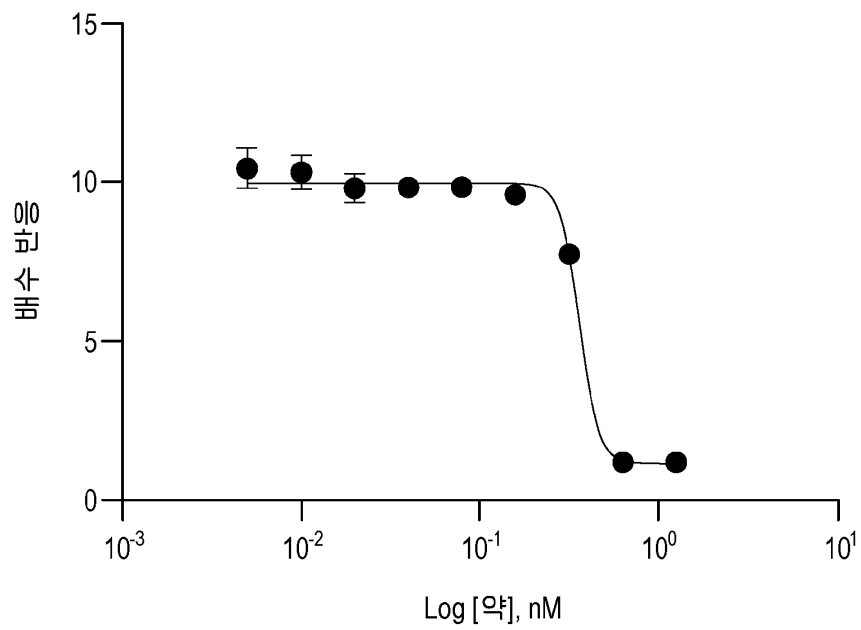
[도6f]

PB101 (DP)

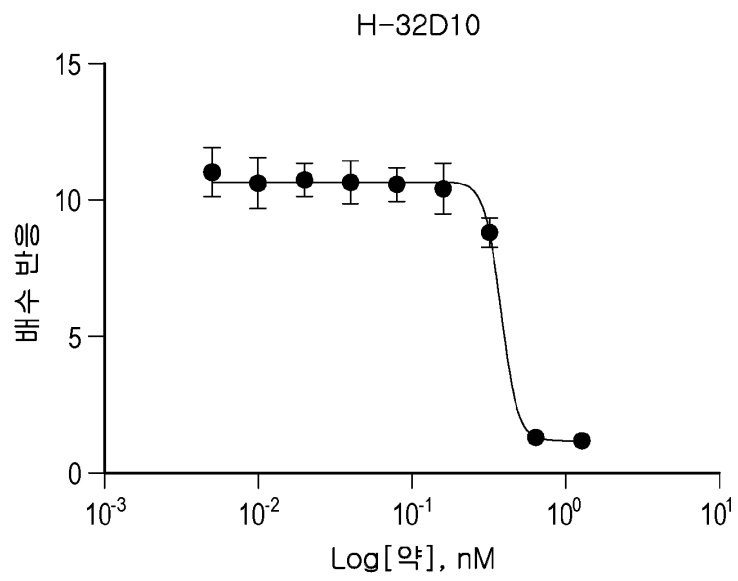


[도6g]

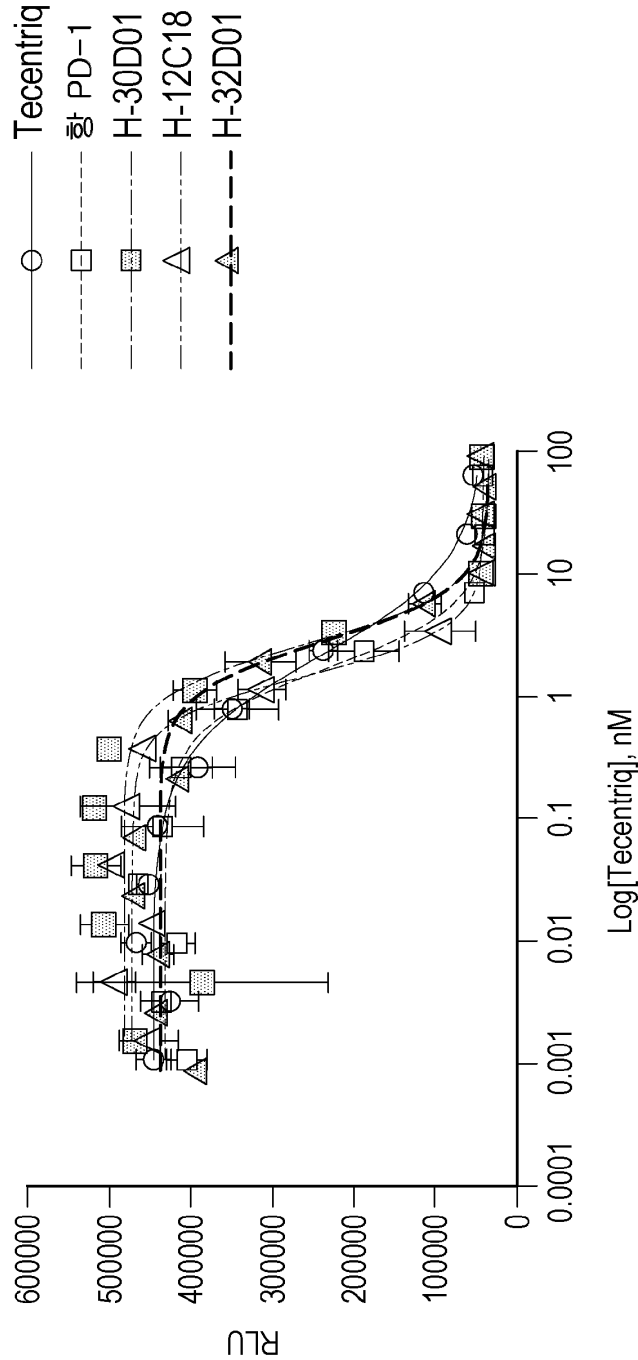
H-32D09



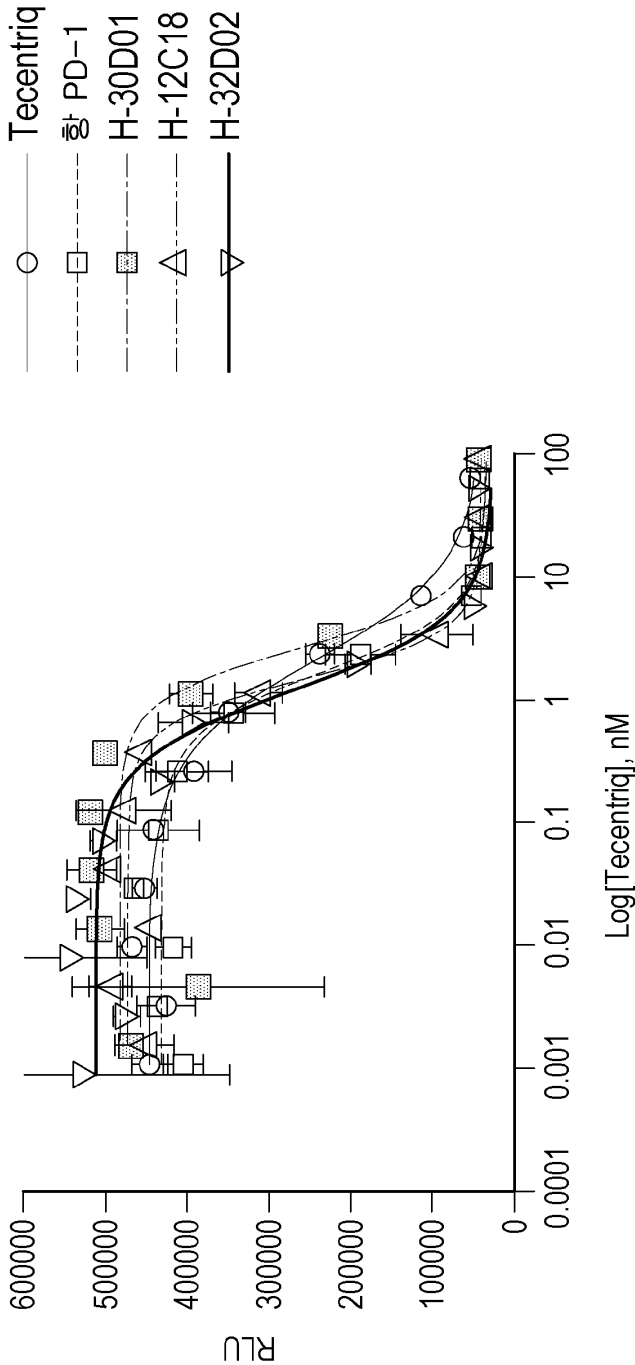
[도 6h]



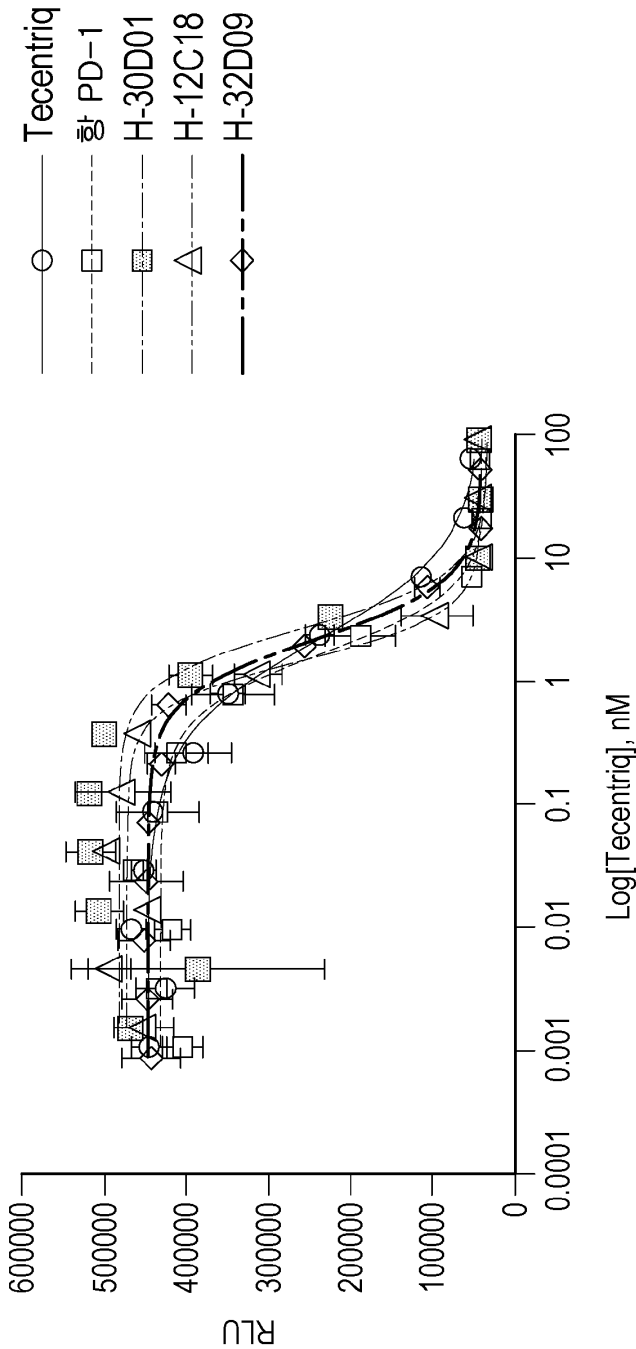
[도 6]



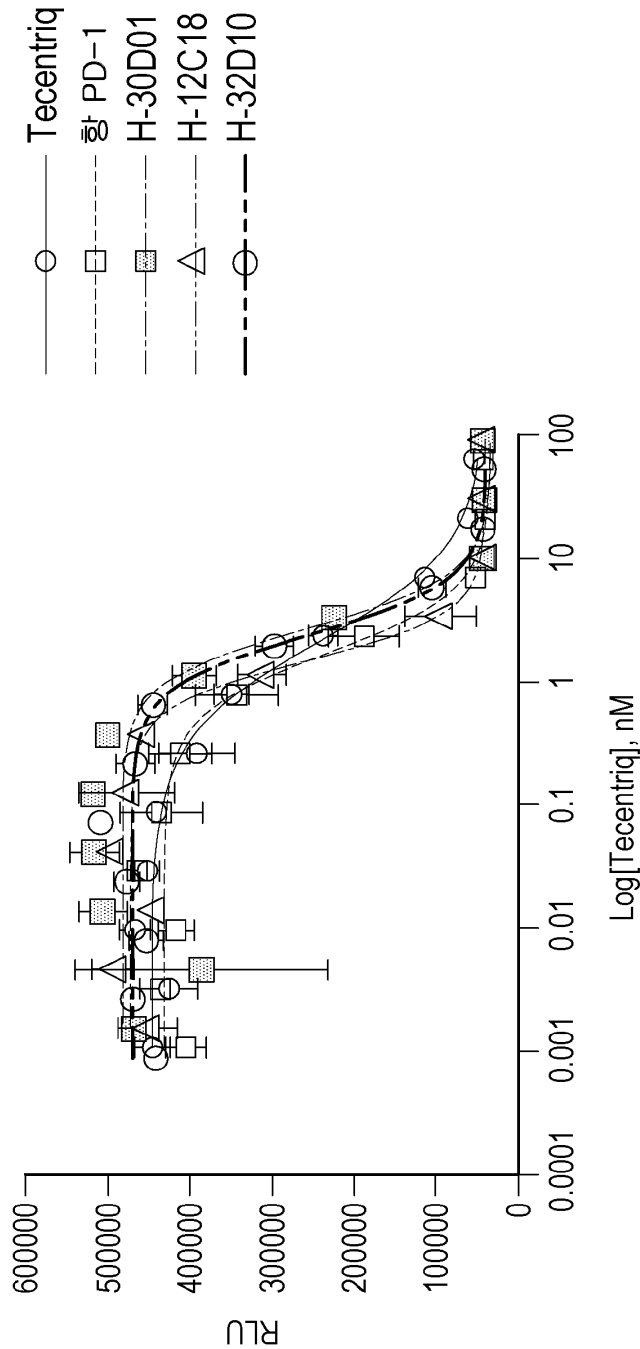
[도 6]



[표 6k]



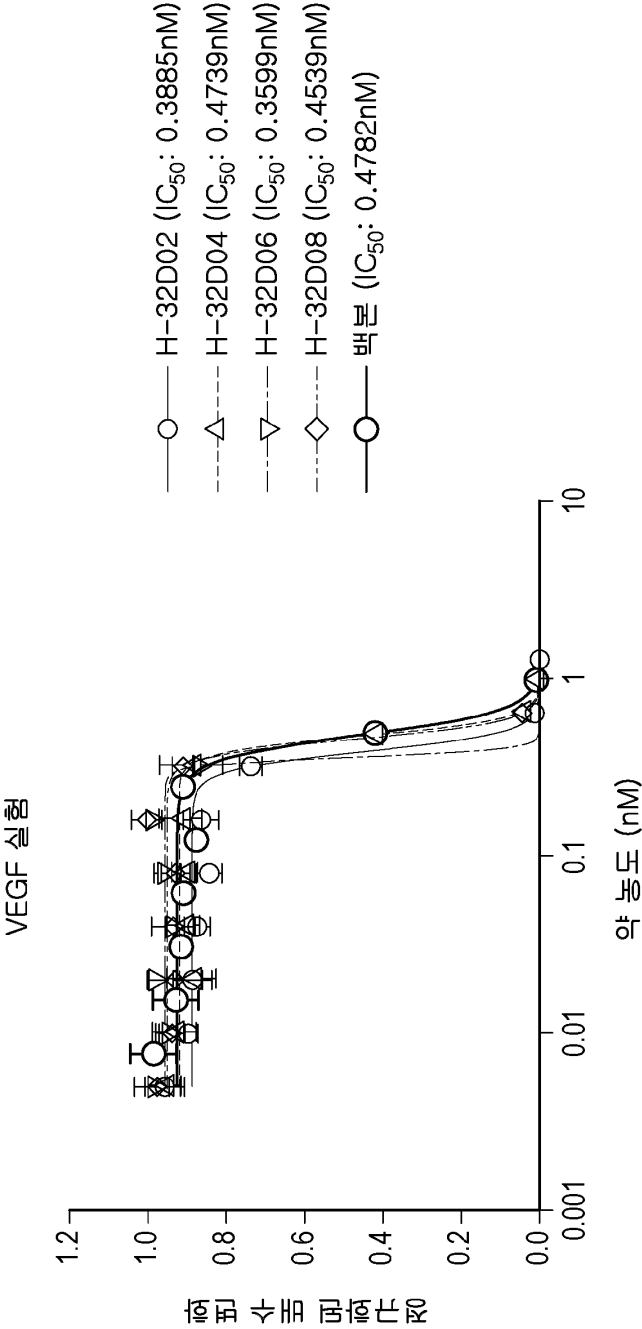
[도 6]



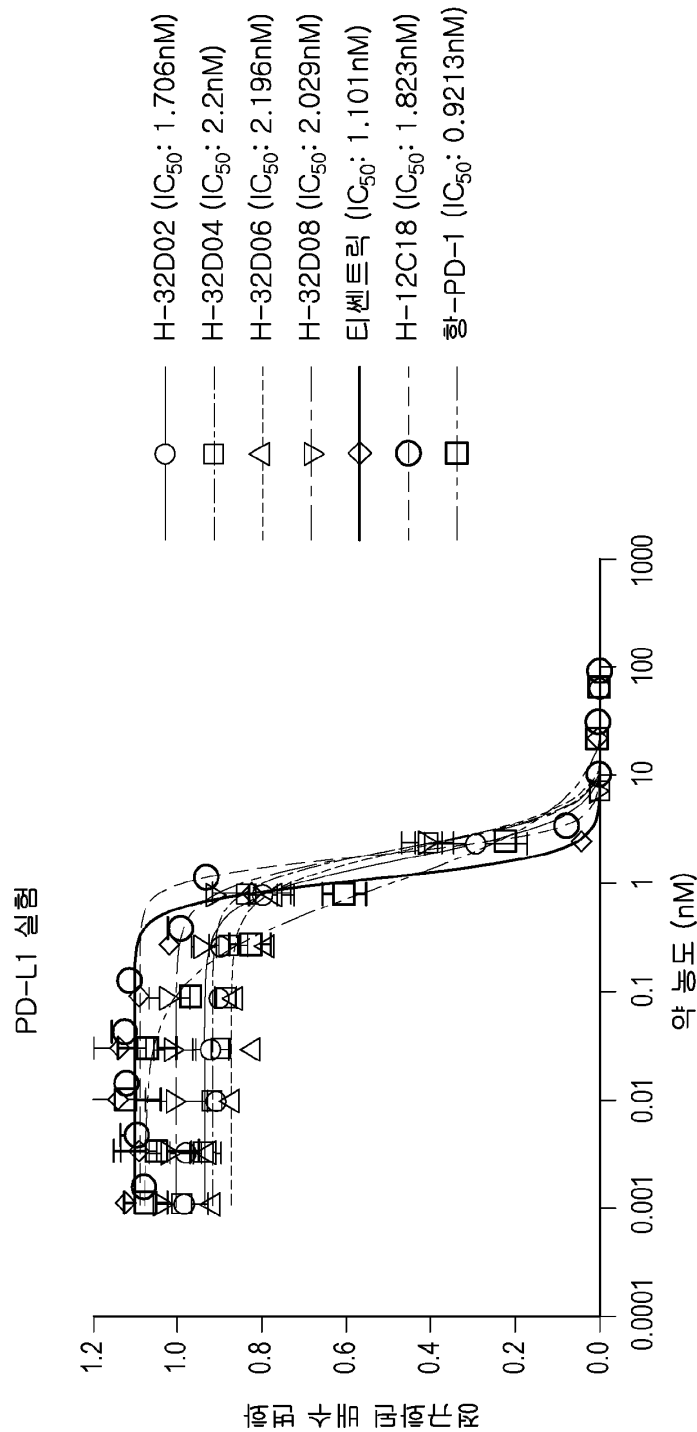
[도6m]

[억제제] vs. 반응- 다중 슬로프 (4 파라미터)	티센트릭	항-PD-1 항체	H-32D01	H-32D02	H-32D09	H-32D10	H-30D01	H-12C18
	10.62	9.117	14.51	8.554	12.17	12.89	9.976	6.666
IC50								

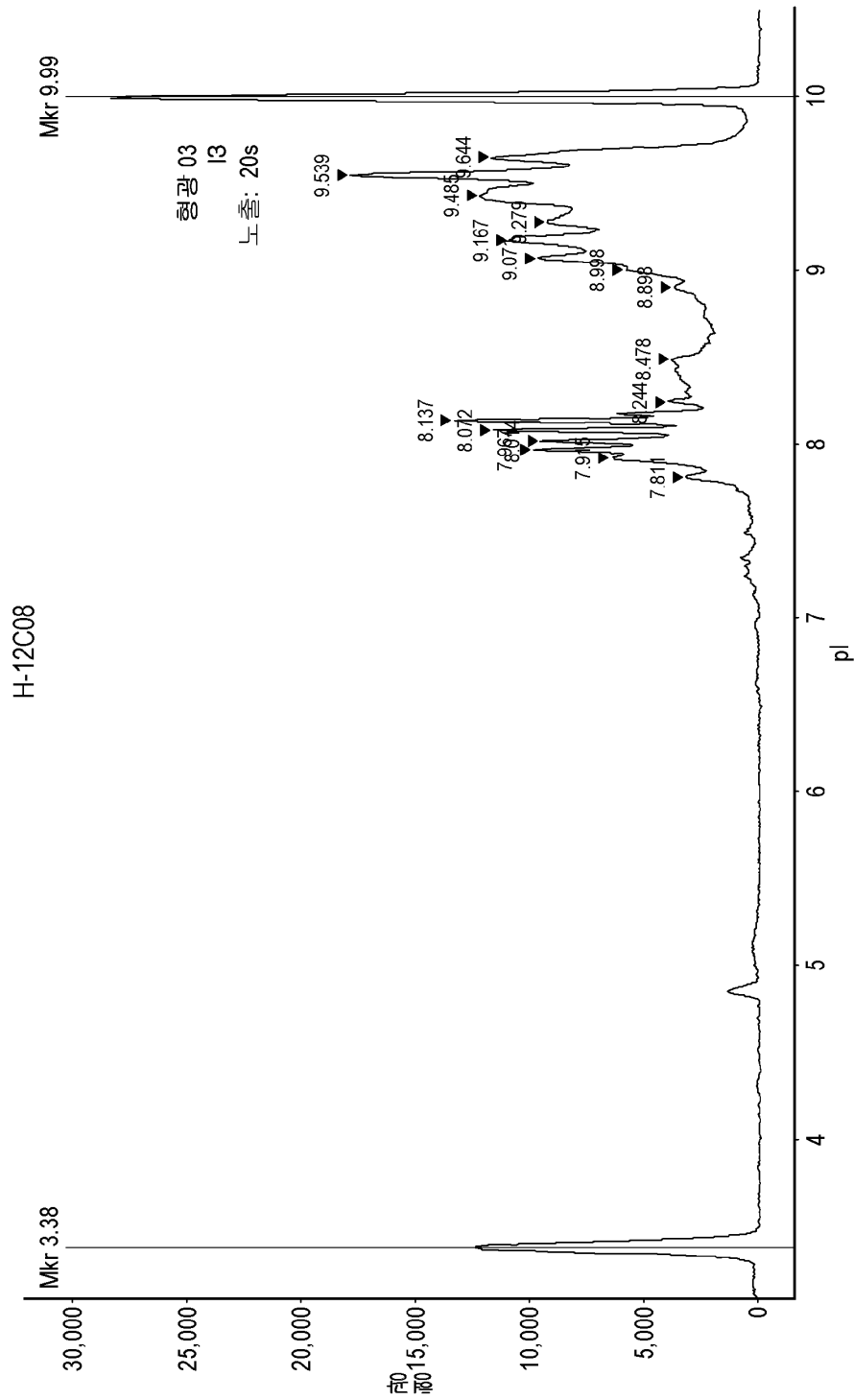
[도 6n]



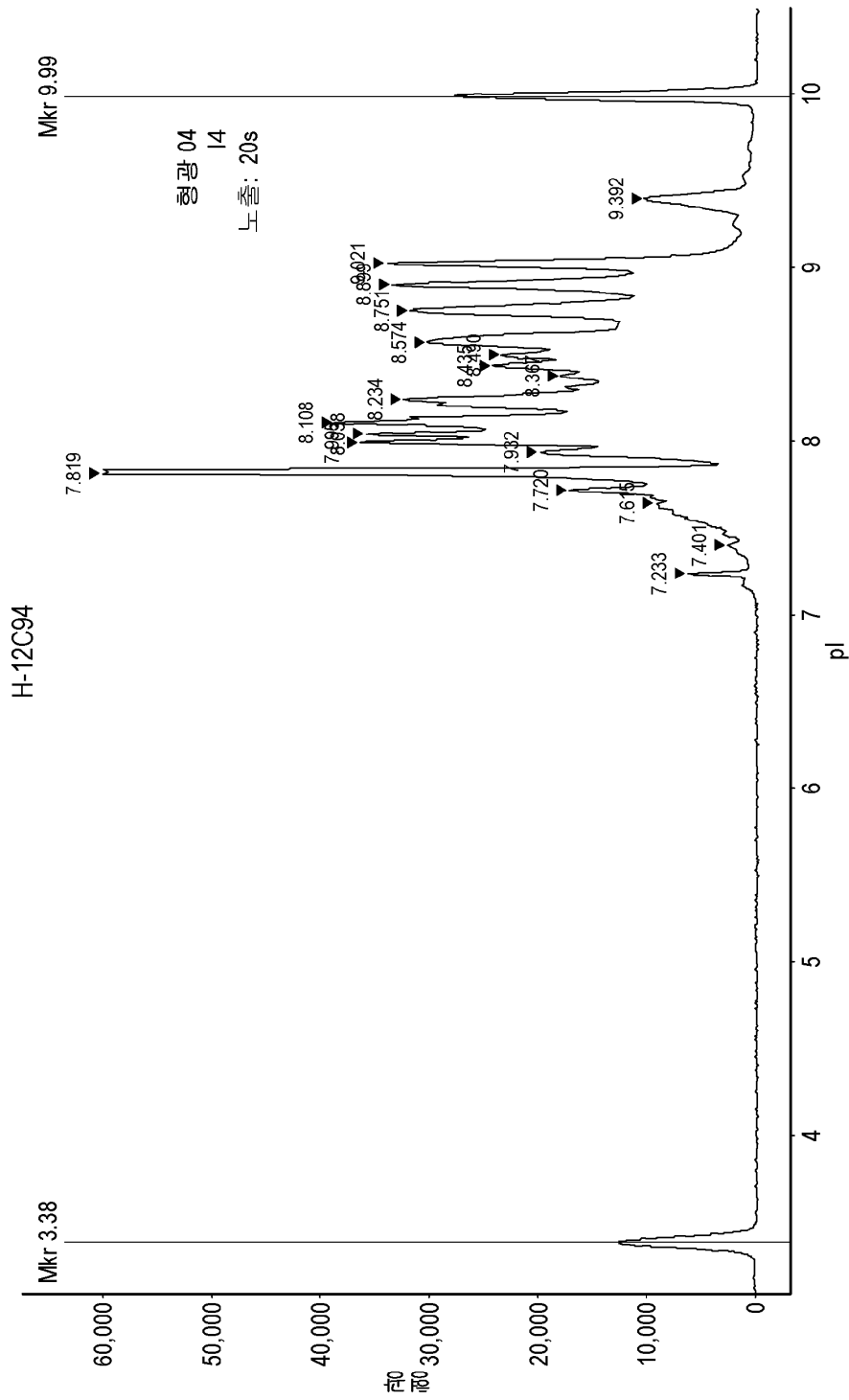
[도60]



[도 7a]



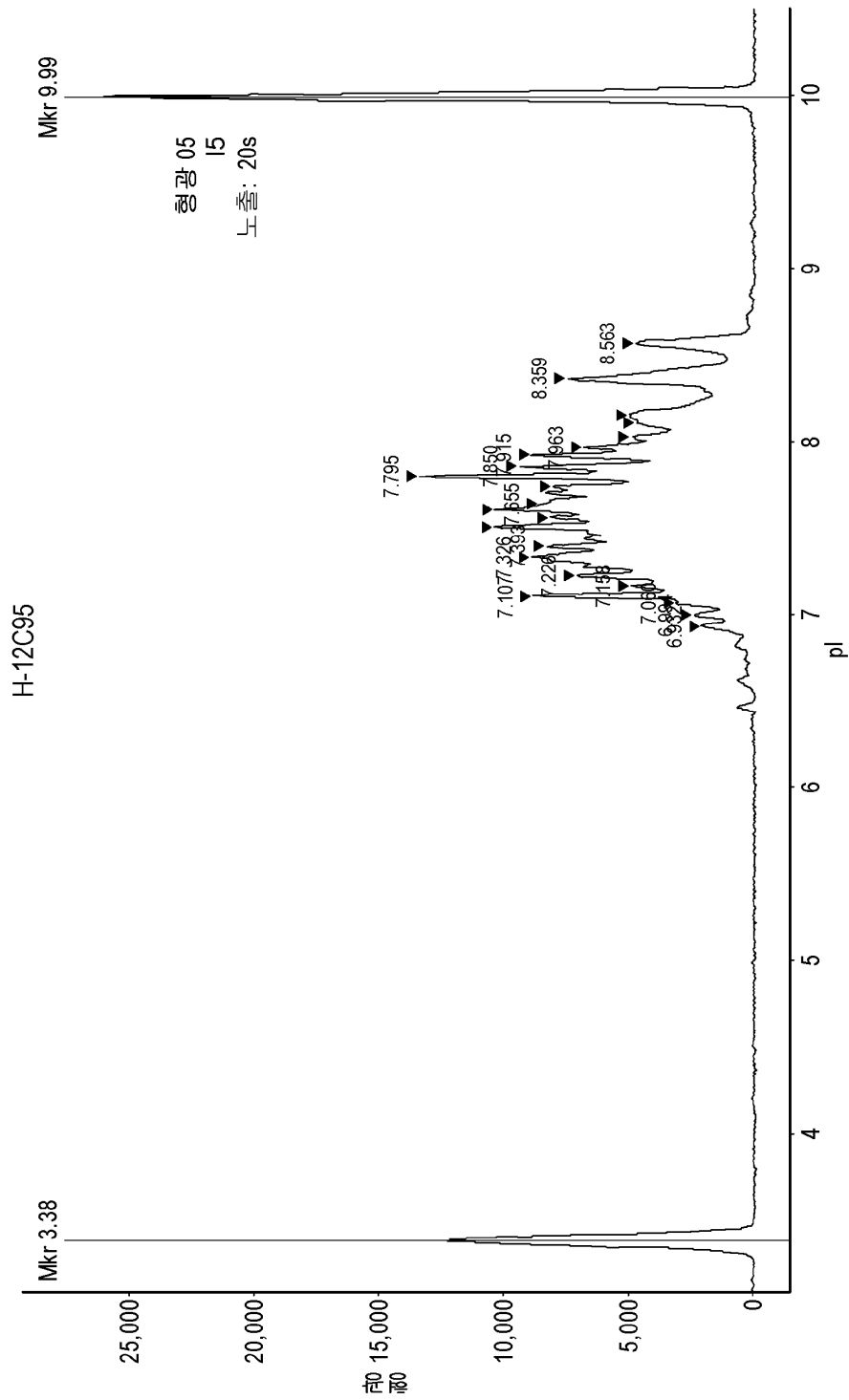
[도 7b]



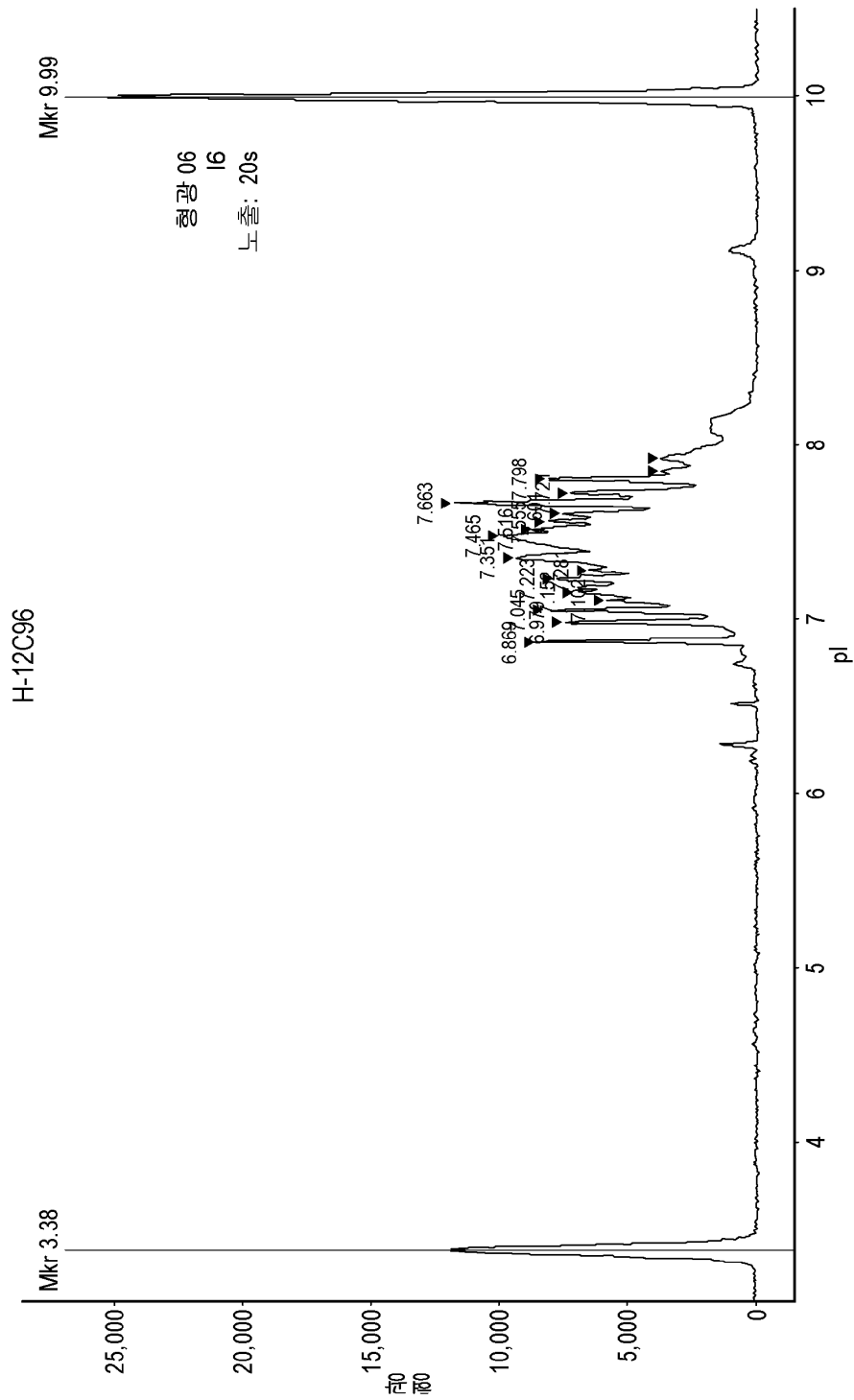
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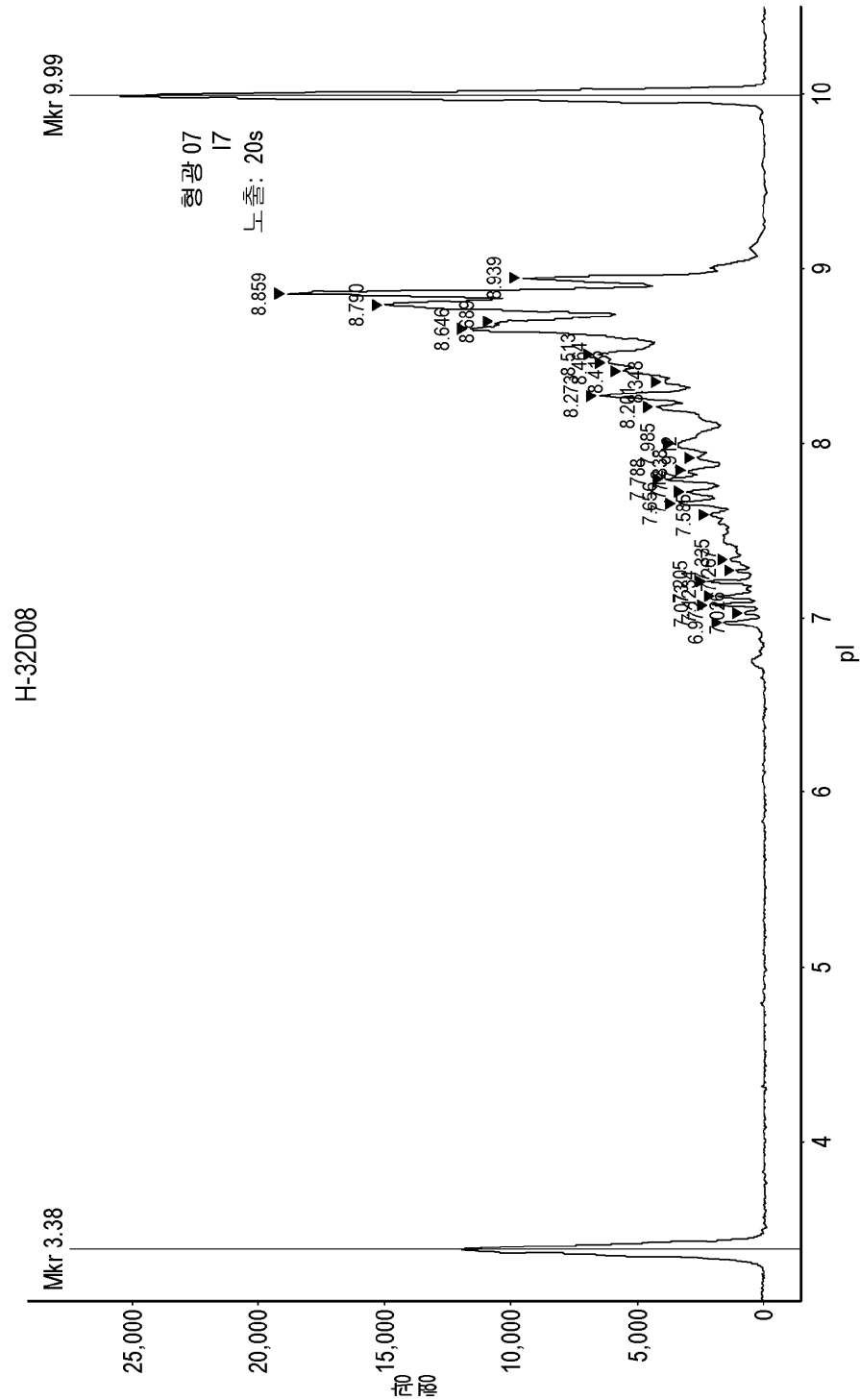
[도7c]



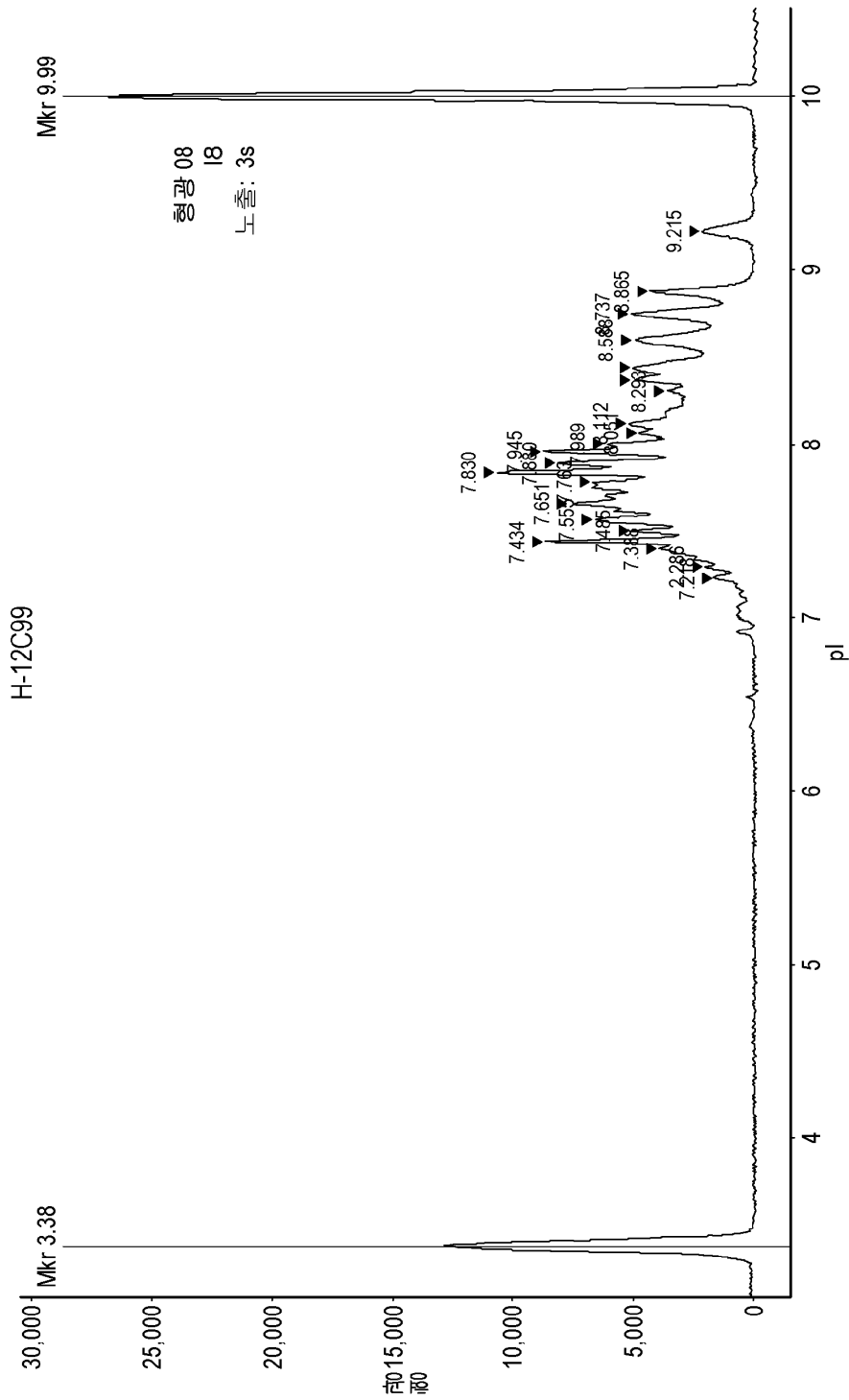
[도7d]



[도 7e]



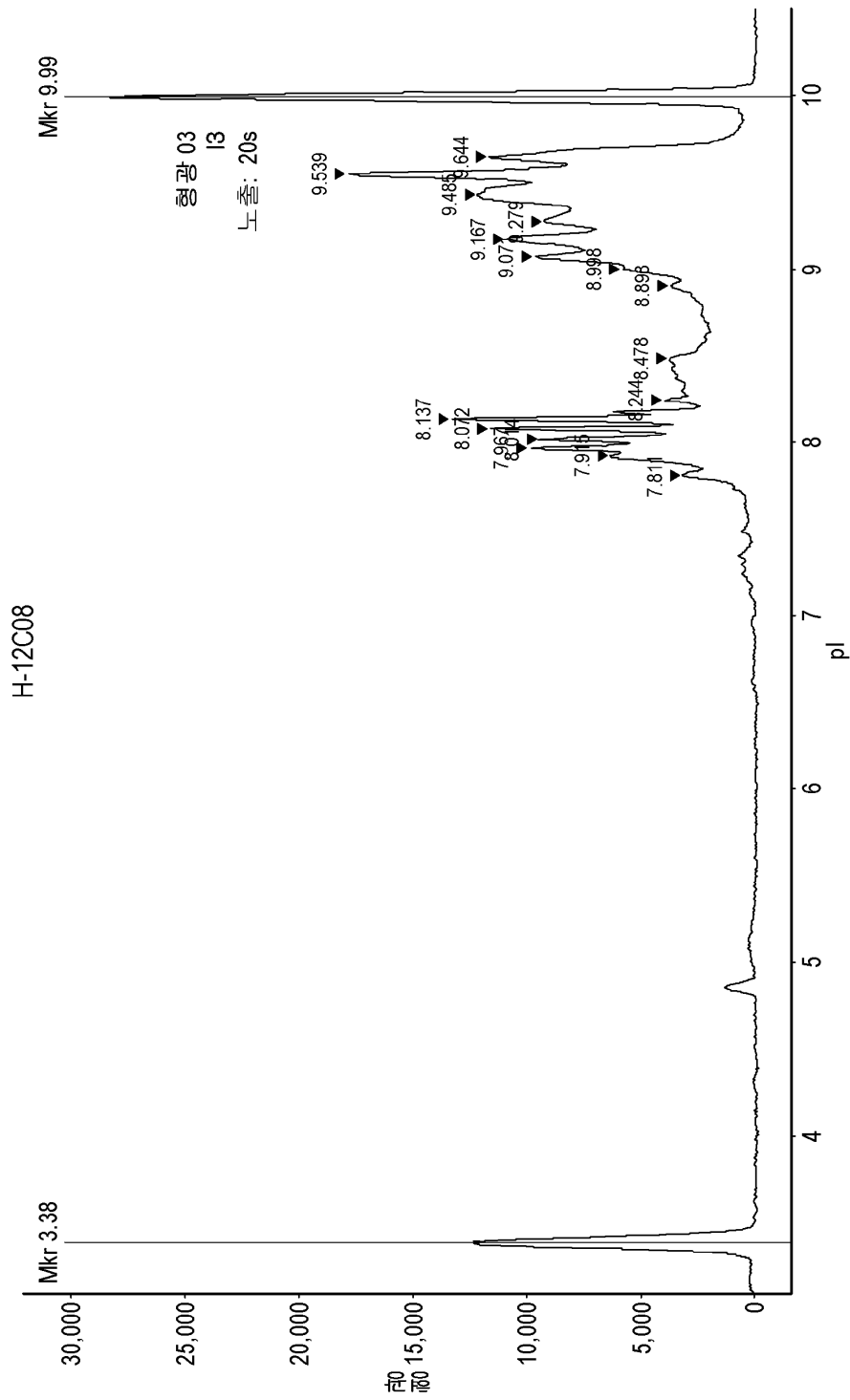
[도 7f]



[도7g]

	%총 (영역)			
샘플명	산성 (pI <7)	중성 (pI 7~8)	염기성 (pI 8<)	총합
PB101 (PD20A01)		49.4	50.6	100
H-12C08		9.6	90.5	100.1
H-12C94		26.8	73	99.8
H-12C95	2.7	75.8	21.4	99.9
H-12C96	7.1	93		100.1
H-12C97	0.8	21.7	77.6	100.1
H-12C99		58.5	41.5	100

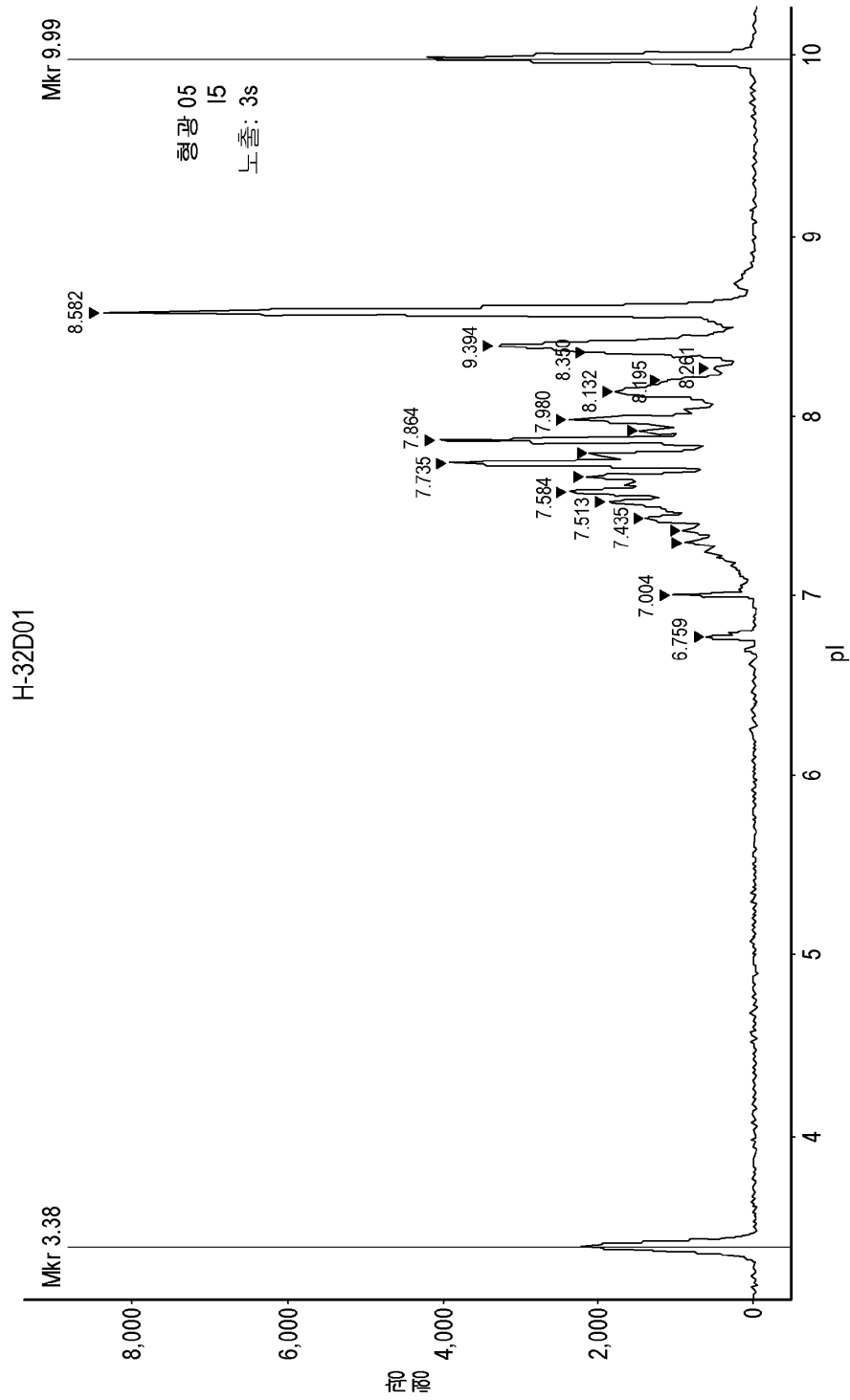
[도 7h]



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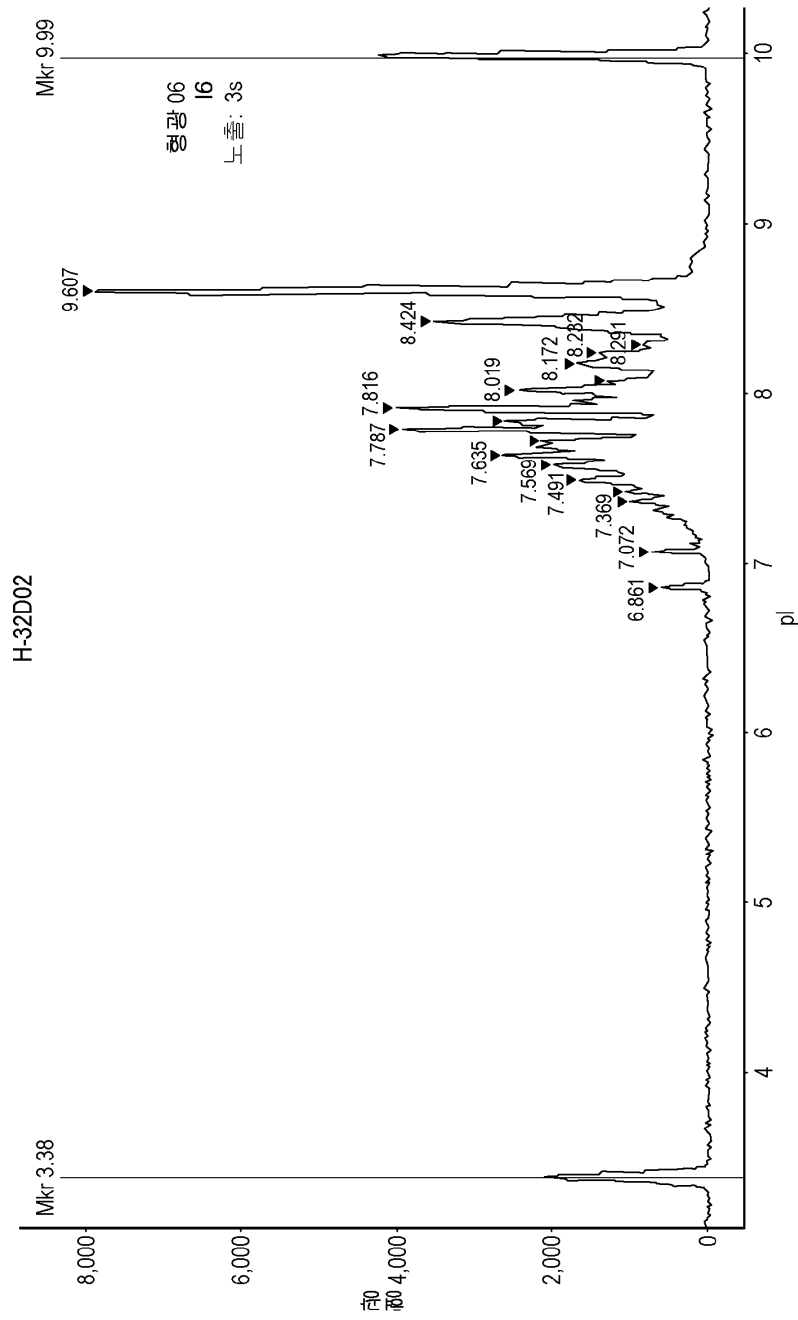
[도 7i]



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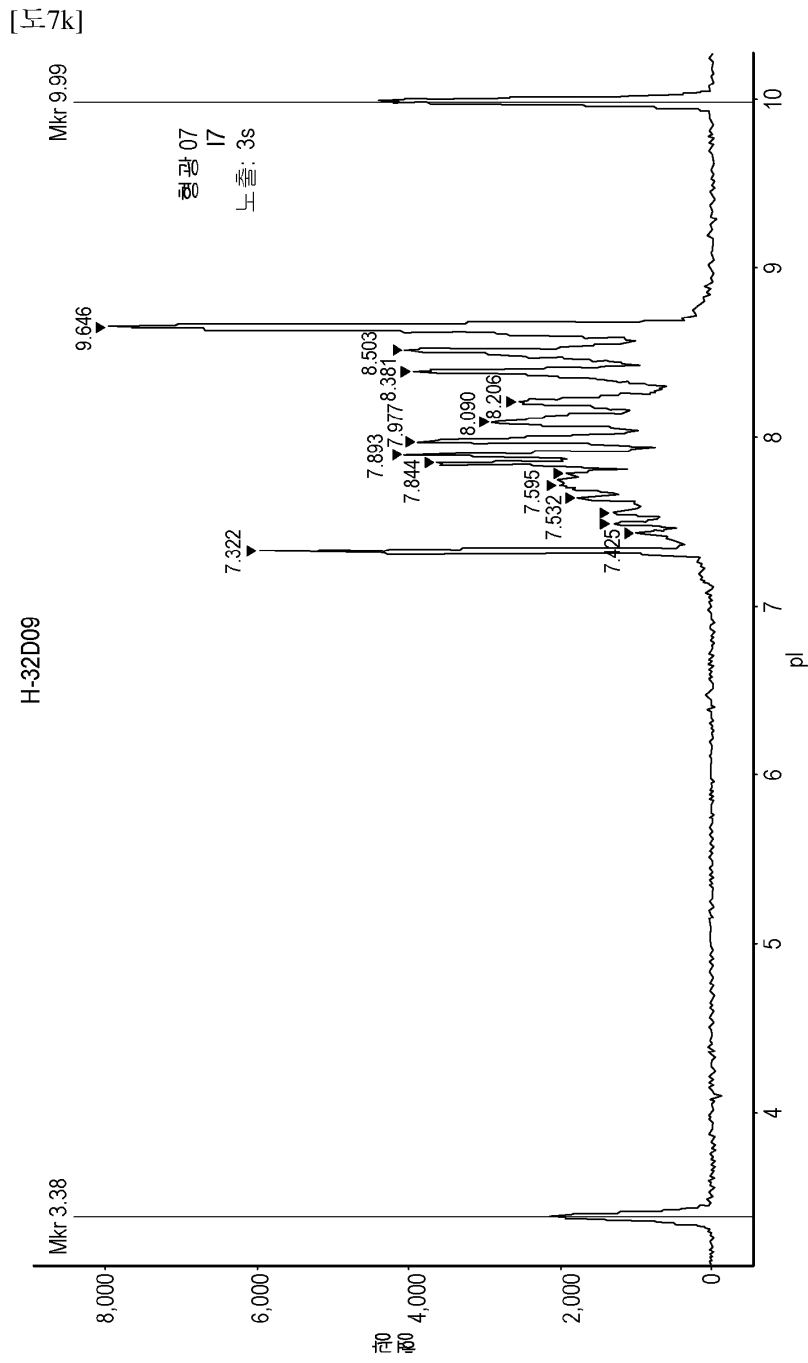
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[도 7]

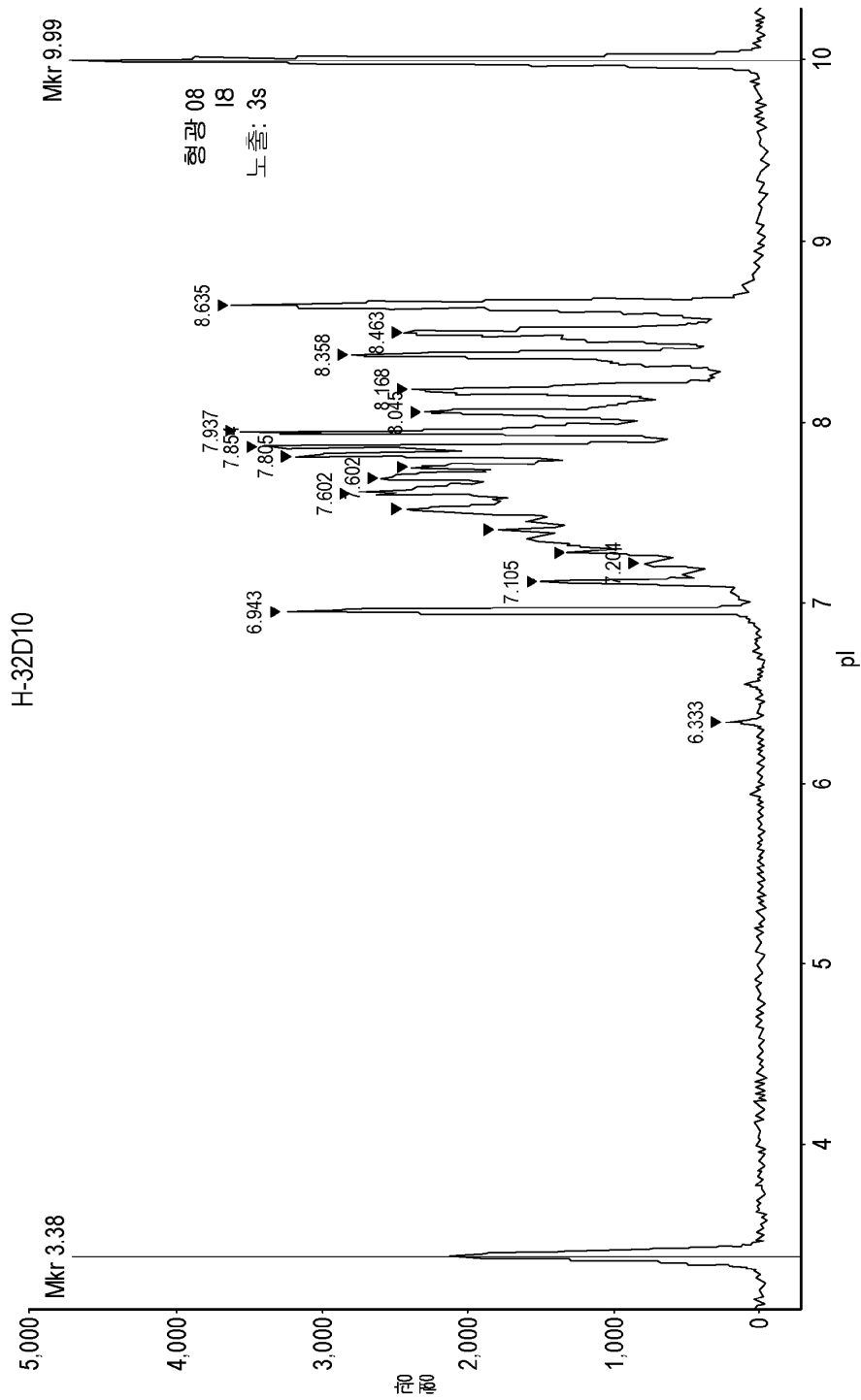


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[도 7]

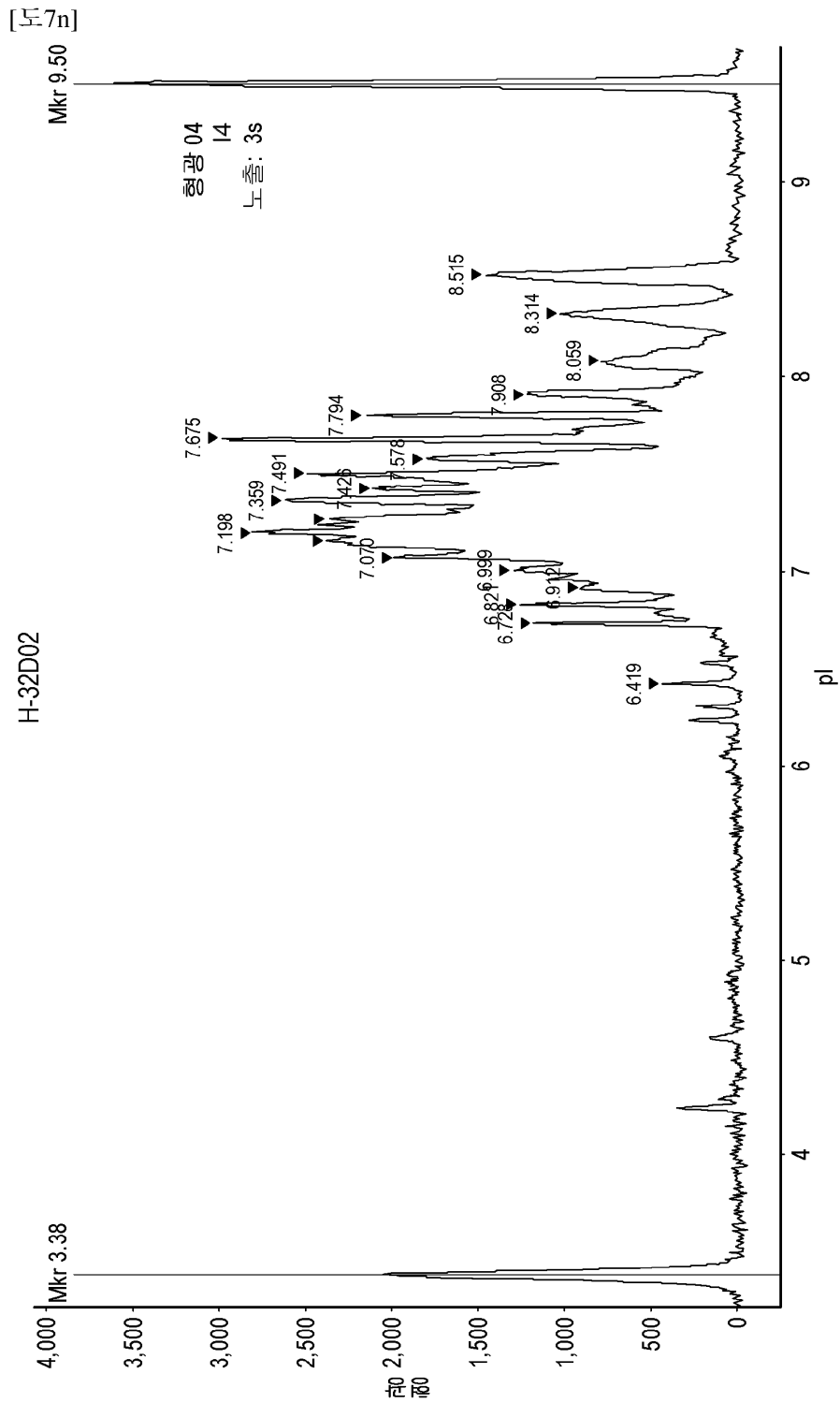


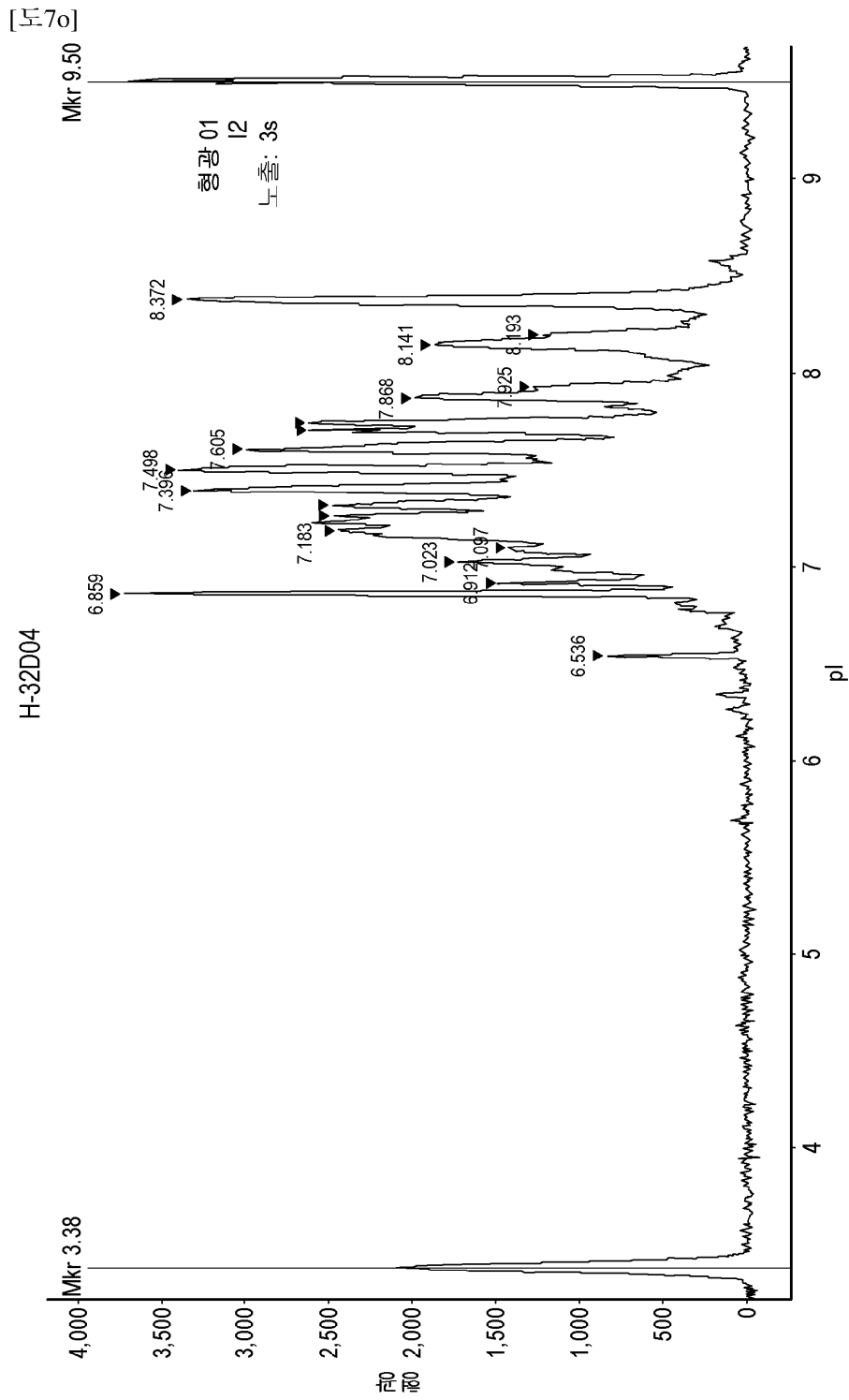
[도7m]

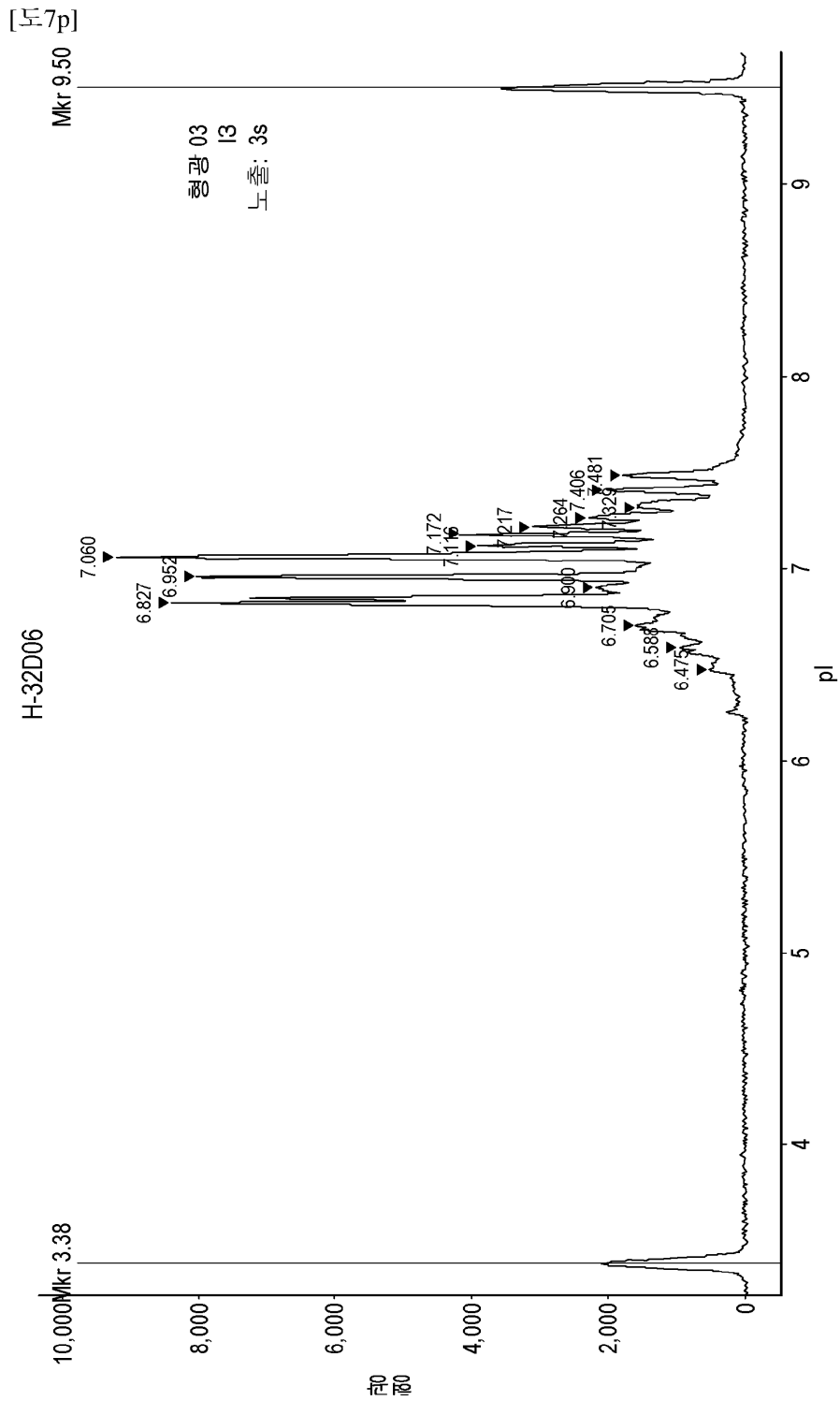
	%총 (영역)			
샘플명	산성 (pI <7)	중성 (pI 7~8)	염기성 (pI 8<)	총합
H-12C08		9.6	90.5	100.1
H-32D01	0.9	56.7	42.5	100.1
H-32D02	0.7	47.5	51.7	99.9
H-32D09		46.6	53.4	100
H-32D10	3.6	62.5	34.2	100.3

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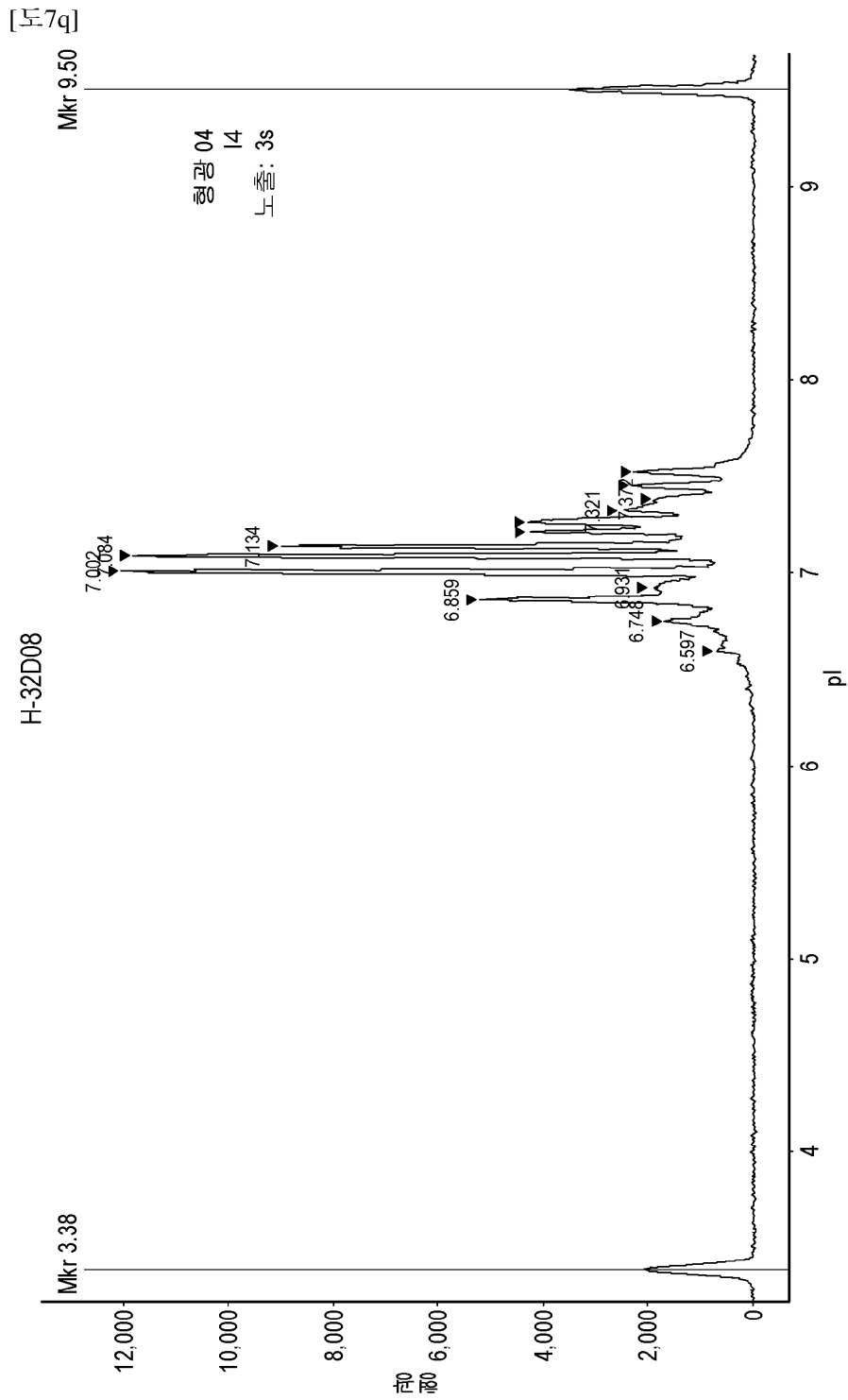






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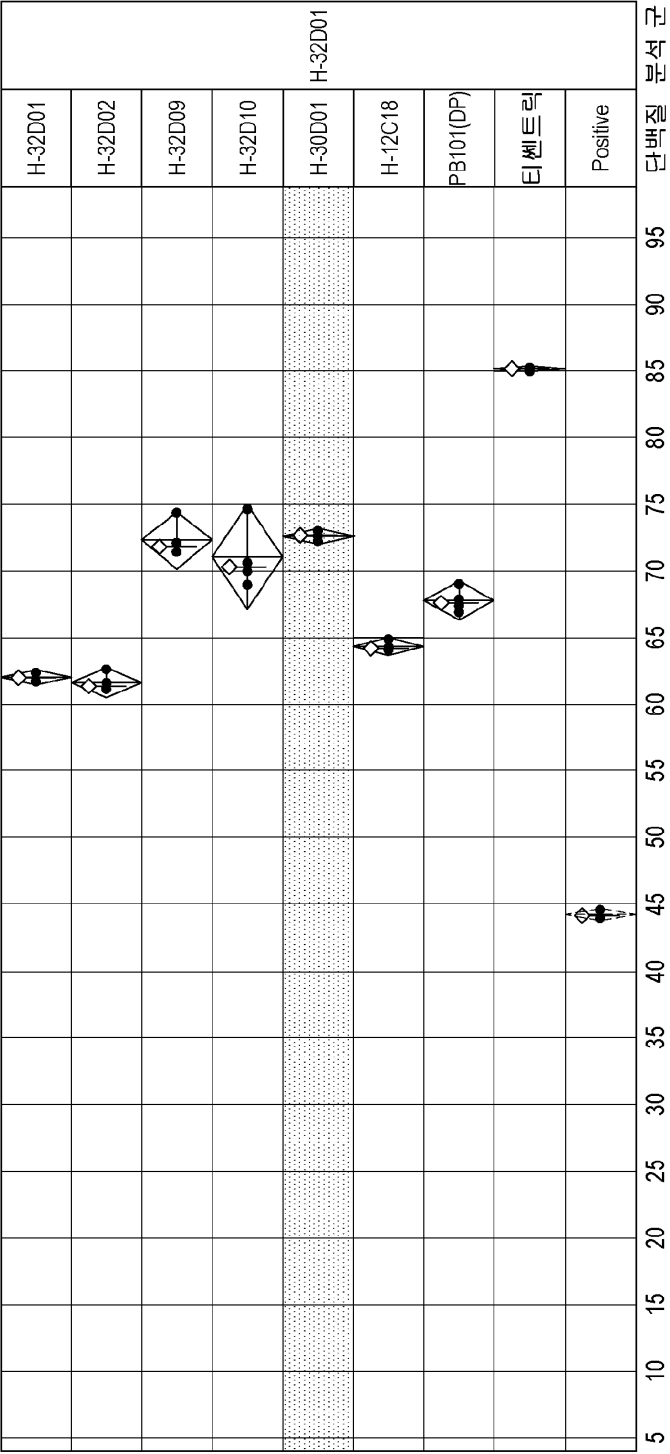
PCT/KR2024/011435



[도7r]

	%총 (영역)			
샘플명	산성 (pI <7)	중성 (pI 7~8)	염기성 (pI 8<)	총합
H-32D02	13.83	73.21	12.98	100.02
H-32D04	11.27	71.29	17.43	99.99
H-32D06	58.6	41.4		100
H-32D08	43.42	56.58		100
H-01C65	48.15	51.84		99.99
PD20A01		46.28	53.71	99.99
티센트릭			99.99	99.99

[도8a]



× 생략

◇ 샘플 복제 군 (8)

◊ 참조 복제 군 (1)

● 2라운드 단백질 열 안정성 실험 (36)

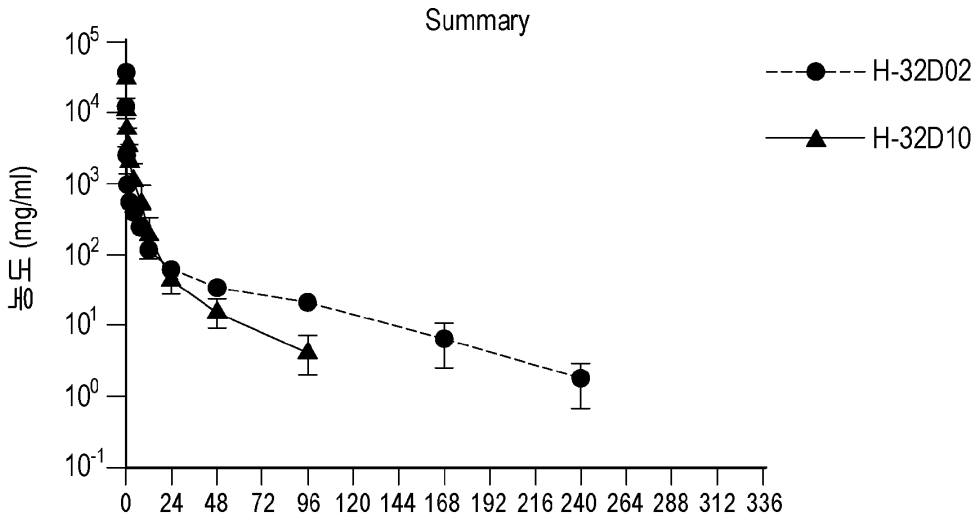
[도8b]

단백질	Tm D - 평균	Tm D 하위 95%	Tm D 상위 95%	Tm D - 종간값	Tm D - 표준오차	Tm D - 최소	Tm D - 최대
H-32D02	61.62978	60.51751	62.74204	61.37045	0.3495	61.14817	62.63004
H-32D01	62.01505	61.5289	62.5012	61.978	0.152759	61.7557	62.3485
H-32D09	72.33633	70.15385	74.5188	71.81767	0.685785	71.37311	74.33686
H-32D10	71.04514	67.12593	74.96436	70.30475	1.231512	68.97205	74.59901
양성	44.23773	67.12593	44.6405	44.20068	0.126559	43.97836	44.57121

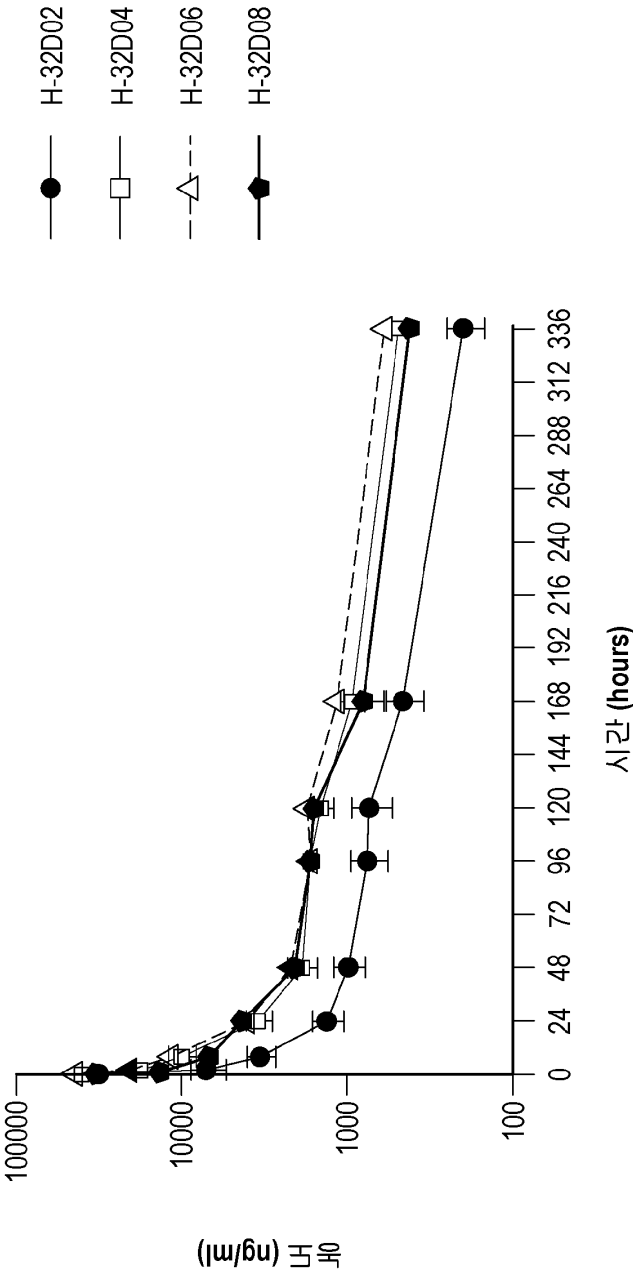
[도8d]

샘플명	Tm D - 평균	Tm D 하위 95%	Tm D 상위 95%	Tm D - 종간값	Tm D - 표준오차	Tm D - 최소	Tm D - 최대
H-32D02	61.684063	61.448215	61.91991	61.75817	0.07410908	61.461735	61.75817
H-32D04	61.1653	60.693604	61.636993	61.313515	0.14821815	60.720642	61.313515
H-32D06	61.83365	60.88089	62.786407	61.685493	0.2993802	61.315105	62.6485
H-32D08	61.203987	60.850365	61.55761	61.16695	0.11111641	61.018795	61.46326
양성	46.3065	46.009777	46.60322	46.343548	0.09323691	46.04716	46.491745

[도9a]



[도9b]



[도10]

