

No.	Lot Number	Peptide Name	Sequence	M.W.	Purity (%)	Amount (mg)	Solubility (0.5mg/ml)
1	K161389	YDE-001	OGQFGLAGPK (O : Hydroxyproline)	960.3	>99.7%	5.0mg 10.0mg	Water
2	K161390	YDE-002	OGQNGLAGPK (O : Hydroxyproline)	954.0	>99.7%	5.0mg 10.0mg	Water
3	K161391	YDE-003	OGQKGLAGPK (O : Hydroxyproline)	968.3	>99.7%	5.0mg 10.0mg	Water
4	K161392	YDE-004	OGQHGLAGPK (O : Hydroxyproline)	977.3	>99.7%	5.0mg 10.0mg	Water
5	K161393	YDE-005	OGQKGLAGPK (O : Hydroxyproline)	968.3	>99.5%	5.0mg 10.0mg	Water
6	K161394	YDE-006	OGQSGLAGPK (O : Hydroxyproline)	927.0	>98.9%	5.0mg 10.0mg	Water
7	K161395	YDE-007	OGQTGLAGPK (O : Hydroxyproline)	941.0	>98.6%	5.0mg 10.0mg	Water
8	K161396	YDE-008	OGQAGLAGPK (O : Hydroxyproline)	931.0	>98.8%	5.0mg 10.0mg	Water
9	K161397	YDE-009	OGQVGLAGPK (O : Hydroxyproline)	959.1	>98.1%	5.0mg 10.0mg	Water
10	K161398	YDE-010	OGQEGLAGPK (O : Hydroxyproline)	953.1	>99.0%	5.0mg 10.0mg	Water
11	K161399	YDE-011	OGQLGLAGPK (O : Hydroxyproline)	953.1	>98.3%	5.0mg 10.0mg	Water
12	K161400	YDE-012	OGQFGLAGPK (O : Hydroxyproline)	987.1	>98.9%	5.0mg 10.0mg	Water
13	K161401	YDE-013	OGQYGLAGPK (O : Hydroxyproline)	1003.1	>98.7%	5.0mg 10.0mg	Water
14	K161402	YDE-014	OGQWGLAGPK (O : Hydroxyproline)	1026.2	>98.5%	5.0mg 10.0mg	Water
15	K161403	YDE-015	OGQDGLAGPK (O : Hydroxyproline)	997.1	>98.1%	5.0mg 10.0mg	Water
16	K161404	YDE-016	OGQDGLAGPK (O : Hydroxyproline)	1011.1	>98.4%	5.0mg 10.0mg	Water
17	K161405	YDE-017	OGQVGLAGPK (O : Hydroxyproline)	1011.1	>98.0%	5.0mg 10.0mg	Water
18	K161406	YDE-018	OGQDALAGPK (O : Hydroxyproline)	969.1	>99.5%	5.0mg 10.0mg	Water
19	K161407	YDE-019	OGQDGLAGPK (O : Hydroxyproline)	1005.2	>99.5%	5.0mg 10.0mg	Water
20	K161408	YDE-020	OGQDGLAGPK (O : Hydroxyproline)	1006.2	>99.2%	5.0mg 10.0mg	Water
21	K161409	YDE-021	OGQDGLAGPK (O : Hydroxyproline)	1006.2	>98.6%	5.0mg 10.0mg	Water
22	K161410	YDE-022	OGQDGLAGPK (O : Hydroxyproline)	1025.1	>98.3%	5.0mg 10.0mg	Water
23	K161411	YDE-023	OGQFGLAGPK (O : Hydroxyproline)	985.1	>98.1%	5.0mg 10.0mg	Water
24	K161412	YDE-024	OGQDGLAGPK (O : Hydroxyproline)	999.1	>98.9%	5.0mg 10.0mg	Water
25	K161413	YDE-025	OGQD-Sar-LAGPK (Sar : iso-Gly) (O : Hydroxyproline)	968.1	>99.5%	5.0mg 10.0mg	Water
26	K161414	YDE-026	OGQD ² LAGPK (S ² : homo-Ser) (O : Hydroxyproline)	981.1	>99.5%	5.0mg 10.0mg	Water
27	K161415	YDE-027	OGQD ² LAGPK (S ² : D(OMe)) (O : Hydroxyproline)	963.1	>99.5%	5.0mg 10.0mg	Water
28	K161416	YDE-028	OGQD ² LAGPK (N ¹ : N(OMe)) (O : Hydroxyproline)	968.1	>99.5%	5.0mg 10.0mg	Water

Fig. 1

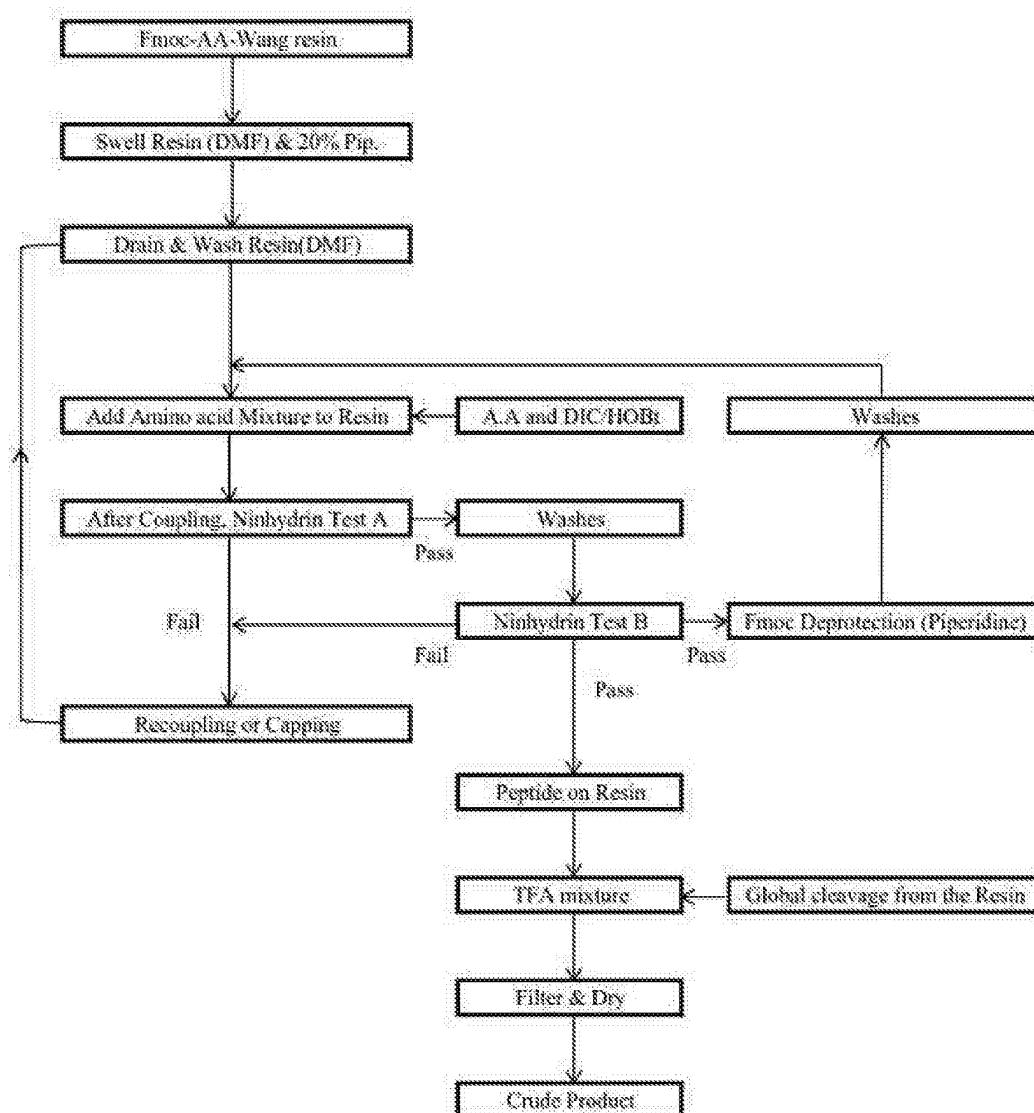


Fig. 2

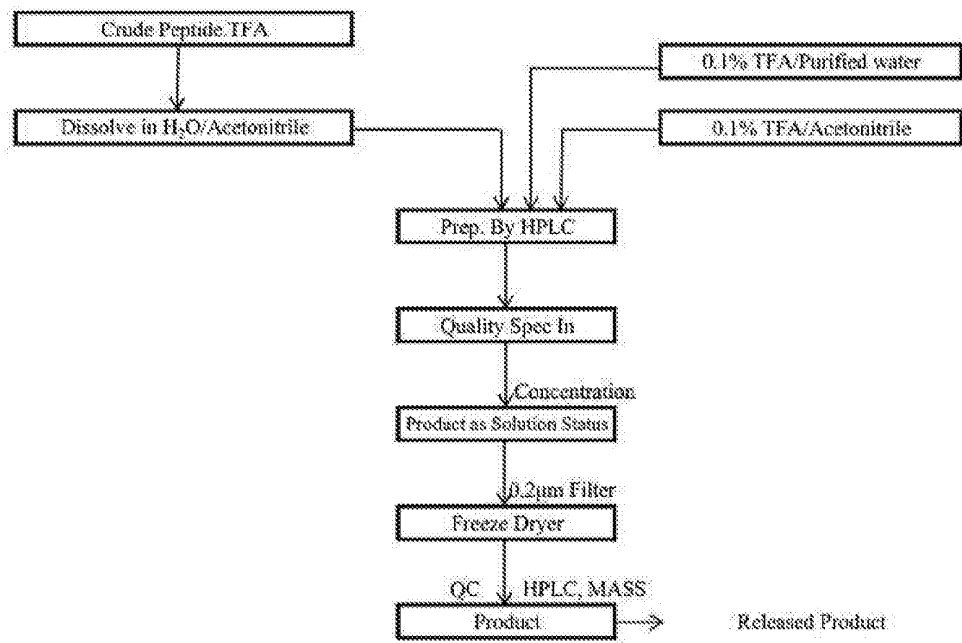


Fig. 3

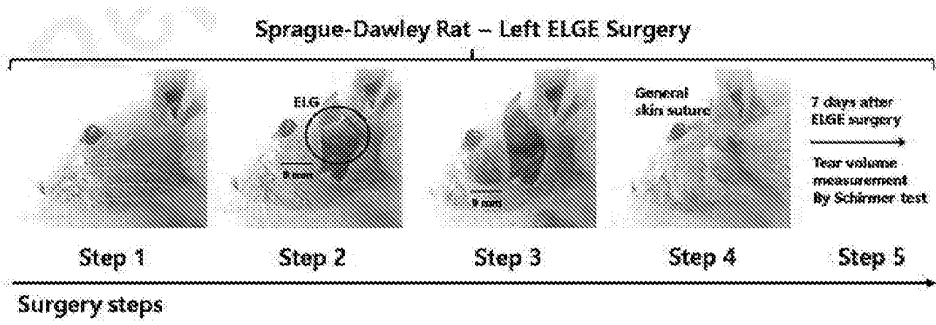


Fig. 4

Groups	Items	Body weights at			Body weight gains [B-A]
		ELGE surgery*	First test material topical eye drop [A]	24 hrs after last treatment [B]*	
Control					
Sham		213.63±21.04	305.50±33.53	340.50±38.46	35.00±11.19
ELGE		215.50±16.10	302.63±20.42	339.13±20.01	36.50±9.97
Reference					
DS		220.50±8.70	304.50±13.11	340.63±10.20	36.13±5.38
Test materials (0.3% solutions)					
YY-102		211.88±12.89	302.00±20.70	337.75±25.95	35.75±6.84
YDE-01		212.63±11.30	302.25±24.57	341.00±24.98	38.75±9.50
YDE-02		210.38±10.89	302.00±15.96	338.00±22.39	36.00±12.29
YDE-03		212.50±14.84	301.00±20.63	339.38±22.93	38.38±7.74
YDE-04		217.50±16.25	302.50±19.66	338.50±21.44	36.00±10.97
YDE-05		212.50±16.75	303.50±17.77	341.50±17.53	38.00±3.12
YDE-06		212.38±19.00	306.38±25.21	345.13±21.06	38.75±6.14
YDE-07		219.13±4.73	310.50±9.99	349.88±12.28	39.38±4.53
YDE-08		213.38±13.99	307.00±13.73	345.63±17.87	38.63±7.01
YDE-09		215.63±13.69	304.25±18.58	341.38±25.47	37.13±10.34
YDE-10		216.00±12.99	305.25±13.82	343.63±16.36	38.38±6.44
YDE-11		219.88±13.42	309.13±20.36	347.00±27.91	37.88±13.66
YDE-12		222.13±9.98	311.00±15.57	349.88±21.70	38.88±9.08
YDE-13		217.63±4.69	305.13±7.66	343.25±11.44	38.13±7.20
YDE-14		216.75±15.53	301.25±20.11	339.75±26.99	38.50±9.94
YDE-15		214.88±14.74	302.13±16.57	340.00±16.44	37.88±12.69
YDE-16		213.50±18.31	299.50±16.42	337.38±20.50	37.88±7.57
YDE-17		214.63±11.81	306.63±17.54	346.25±19.26	39.63±10.51
YDE-18		213.88±13.24	307.88±13.27	347.38±23.02	39.50±14.68
YDE-19		218.88±11.29	307.25±12.85	345.38±21.71	38.13±9.83
YDE-20		217.88±9.61	300.75±16.79	339.25±15.68	38.50±5.71
YDE-21		216.38±15.31	301.38±20.89	340.13±21.53	38.75±8.14
YDE-22		219.38±10.85	304.13±14.56	343.50±21.37	39.38±9.30
YDE-23		219.00±12.54	308.25±15.64	346.00±15.26	37.75±6.94
YDE-24		212.13±18.41	298.38±25.85	334.00±31.75	35.63±10.29
YDE-25		213.13±13.39	303.63±21.87	342.50±19.82	38.88±5.84
YDE-26		213.63±14.71	305.75±23.07	343.25±29.09	37.50±9.38
YDE-27		214.75±13.73	306.63±25.44	345.38±26.40	38.75±10.02
YDE-28		212.75±13.36	297.63±21.12	336.38±22.02	38.75±7.63

Fig. 5

Groups	Items	Body weights at		24 hrs after last treatment [B]*	Body weight gains [B-A]
		ELGE surgery*	First test material topical eye drop [A]		
Control					
	Sham	242.38±7.73	320.25±9.91	363.38±27.21	43.13±19.71
	ELGE	243.88±3.83	329.25±18.90	367.50±19.89	38.25±11.40
Reference					
	DS	246.63±15.68	330.50±23.33	369.63±37.46	39.13±25.56
	YY-101	241.25±4.37	318.88±10.91	356.25±18.16	37.38±7.82
	YY-102	242.38±11.46	318.75±15.20	361.25±23.56	42.50±9.41
Test materials (0.3% solutions)					
	YDE-029	242.25±16.63	327.38±18.75	373.75±28.50	46.38±12.49
	YDE-030	243.25±10.26	315.88±14.96	355.50±29.68	39.63±16.61
	YDE-031	241.00±15.82	316.75±27.58	359.00±39.87	42.25±14.96
	YDE-032	242.75±9.32	324.25±14.59	365.38±16.16	41.13±10.12
	YDE-033	243.50±11.96	327.50±17.57	377.13±26.59	49.63±16.27
	YDE-034	243.88±8.68	322.63±17.15	361.63±19.08	39.00±4.99
	YDE-035	240.88±11.29	321.00±22.17	358.50±29.18	37.50±20.36
	YDE-036	242.25±14.01	329.38±21.07	378.38±24.20	49.00±10.81
	YDE-037	244.50±10.94	324.88±17.36	369.13±21.43	44.25±8.83
	YDE-039	242.88±7.14	325.25±15.51	363.25±28.35	38.00±15.41
	YDE-040	241.13±13.39	319.25±14.10	357.00±27.93	37.75±19.37
	YDE-041	244.75±14.49	322.88±22.47	366.13±37.43	43.25±16.97
	YDE-042	239.13±8.29	323.38±8.28	372.38±19.46	49.00±13.54
	YDE-043	246.25±7.92	324.00±14.31	361.25±19.20	37.25±13.63

Fig. 6

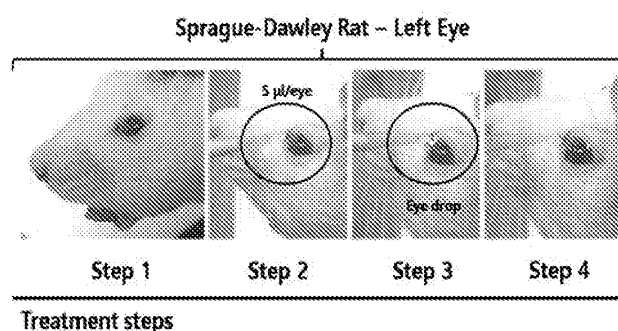


Fig. 7

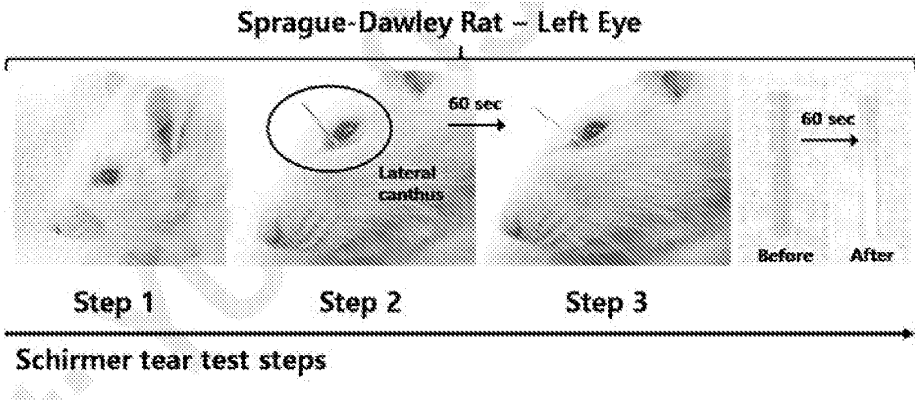


Fig. 8

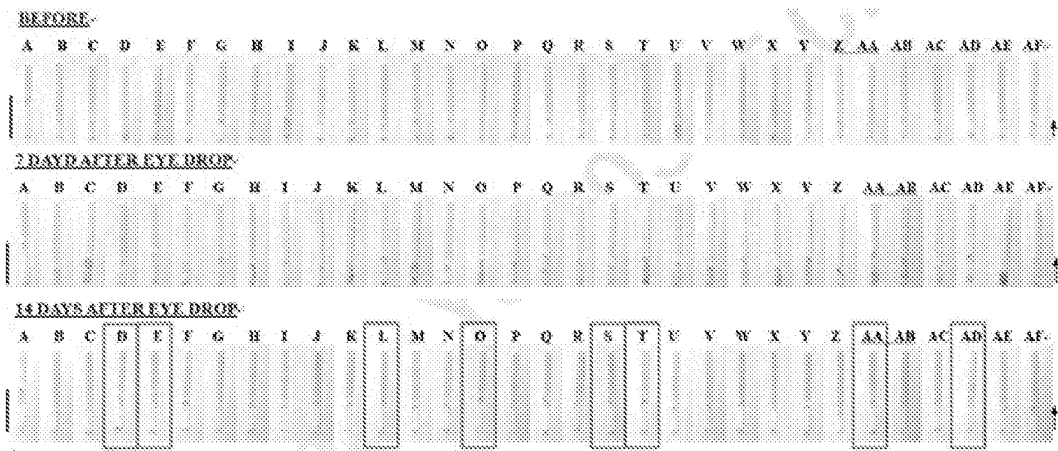


Fig. 9

Groups	Tear volumes (mm) after test material topical eye drop		
	-1 day	7 days	14 days
Control			
Sham	8.34±0.73	8.56±0.76	8.63±0.93
ELGE	3.54±0.78 ^a	2.65±0.85 ^a	3.27±1.06 ^a
Reference			
DS	3.53±0.66 ^a	4.10±1.07 ^{ad}	4.80±0.94 ^{ad}
Test materials (0.3% solutions)			
YY-102	3.58±0.93 ^a	4.59±1.43 ^{ac}	5.77±1.99 ^{ac}
YDE-01	3.55±0.93 ^a	4.88±1.62 ^{ac}	5.92±2.19 ^{ac}
YDE-02	3.59±0.75 ^a	3.84±1.16 ^a	5.01±1.67 ^{ad}
YDE-03	3.56±0.74 ^a	4.13±1.76 ^{ad}	4.88±1.57 ^{ad}
YDE-04	3.57±0.55 ^a	3.42±1.06 ^a	5.19±1.84 ^{ad}
YDE-05	3.56±0.86 ^a	3.85±0.93 ^a	5.08±1.91 ^{ad}
YDE-06	3.56±0.65 ^a	3.44±1.69 ^a	5.35±1.68 ^{ad}
YDE-07	3.53±0.68 ^a	3.91±1.28 ^a	5.45±1.26 ^{ad}
YDE-08	3.54±0.82 ^a	4.57±1.25 ^{ac}	6.10±2.36 ^{ac}
YDE-09	3.56±0.78 ^a	3.76±1.21 ^a	4.54±1.11 ^a
YDE-10	3.52±0.61 ^a	3.42±1.31 ^a	4.35±1.36 ^a
YDE-11	3.56±0.88 ^a	4.22±1.45 ^{ad}	6.16±2.16 ^{ac}
YDE-12	3.55±0.71 ^a	3.68±0.99 ^a	5.67±1.86 ^{ac}
YDE-13	3.55±0.49 ^a	5.27±1.50 ^{ac}	5.49±1.92 ^{ac}
YDE-14	3.55±0.66 ^a	3.81±1.21 ^a	5.62±1.85 ^{ac}
YDE-15	3.54±0.73 ^a	4.03±2.19 ^{ad}	6.65±2.13 ^{ac}
YDE-16	3.56±0.93 ^a	4.59±1.13 ^{ac}	5.98±2.27 ^{ac}
YDE-17	3.54±0.91 ^a	4.00±1.22 ^{ad}	4.89±1.50 ^a
YDE-18	3.58±0.68 ^a	3.75±1.54 ^a	4.99±1.60 ^{ad}
YDE-19	3.58±0.63 ^a	4.84±1.39 ^{ac}	4.52±1.07 ^a
YDE-20	3.56±0.86 ^a	3.41±1.47 ^a	4.20±1.35 ^a
YDE-21	3.55±0.72 ^a	4.08±1.33 ^{ad}	4.90±1.13 ^a
YDE-22	3.50±0.75 ^a	3.19±0.67 ^a	4.10±0.95 ^a
YDE-23	3.51±0.72 ^a	5.32±2.30 ^{ac}	5.78±2.23 ^{ac}
YDE-24	3.53±0.63 ^a	3.85±1.30 ^a	5.72±1.36 ^{ac}
YDE-25	3.56±0.75 ^a	3.21±0.72 ^a	4.72±2.19 ^a
YDE-26	3.57±0.57 ^a	4.32±1.47 ^{ad}	6.01±1.83 ^{ac}
YDE-27	3.57±0.64 ^a	2.82±0.86 ^a	3.95±1.52 ^a
YDE-28	3.56±0.91 ^a	4.04±0.99 ^{ad}	4.73±1.18 ^a

Fig. 10

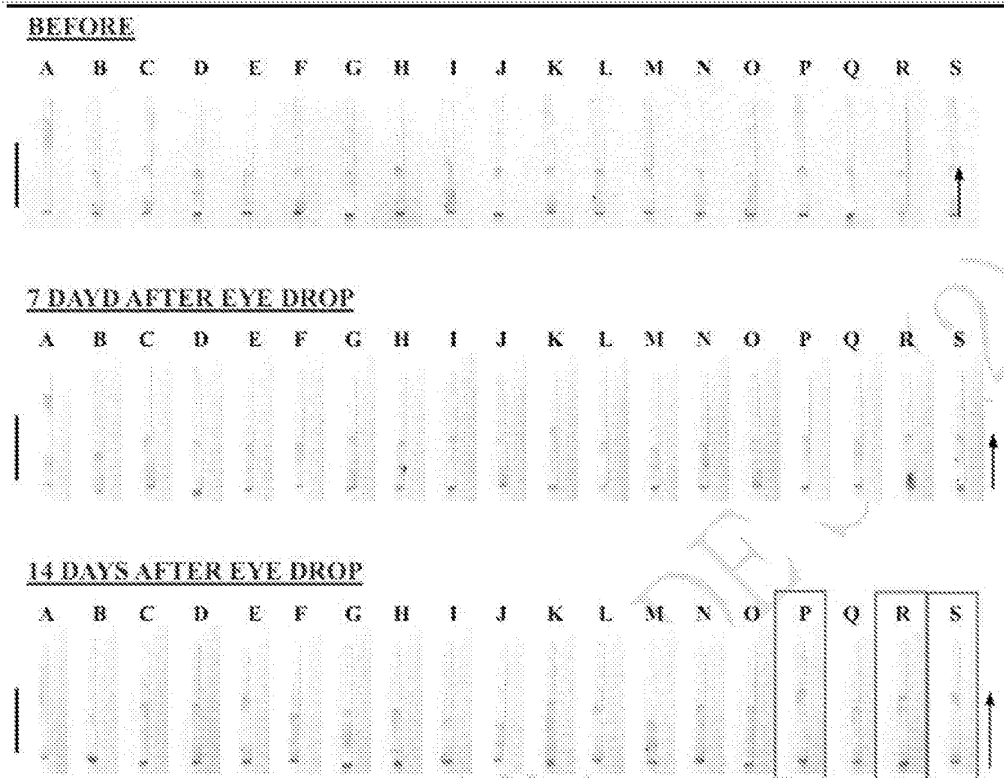


Fig. 11

Groups	Items	Tear volumes (mm) after test material topical eye drop		
		-1 day	7 days	14 days
Control				
	Sham	10.90±1.69	10.38±1.08	10.28±0.69
	ELGE	4.81±1.09 ^a	4.37±0.83 ^b	4.70±0.65 ^b
Reference				
	DS	4.74±1.30 ^a	5.72±1.28 ^{be}	6.56±1.15 ^{bd}
	YY-101	4.86±1.08 ^a	5.36±0.68 ^{be}	6.25±0.68 ^{bd}
	YY-102	4.94±0.71 ^a	5.77±1.01 ^{be}	6.60±0.64 ^{bd}
Test materials (0.3% solutions)				
	YDE-029	4.72±1.05 ^a	5.33±1.43 ^b	6.03±1.71 ^b
	YDE-030	4.93±1.15 ^a	5.69±1.79 ^b	6.65±2.17 ^b
	YDE-031	4.70±0.69 ^a	5.63±1.97 ^b	5.91±0.85 ^{be}
	YDE-032	4.94±1.04 ^a	5.58±0.80 ^{be}	5.03±0.93 ^b
	YDE-033	4.77±1.32 ^a	4.99±1.20 ^b	4.54±1.16 ^b
	YDE-034	4.88±1.07 ^a	6.16±1.01 ^{bd}	6.43±1.86 ^b
	YDE-035	4.92±1.18 ^a	4.96±0.96 ^b	6.25±0.79 ^{bd}
	YDE-036	4.83±1.07 ^a	4.95±1.05 ^b	5.13±1.03 ^b
	YDE-037	4.68±0.83 ^a	4.98±0.66 ^b	5.80±0.96 ^{be}
	YDE-039	4.81±1.27 ^a	6.04±1.01 ^{bd}	6.44±1.96 ^{be}
	YDE-040	4.77±0.91 ^a	5.77±1.05 ^{be}	8.63±1.53 ^{cd}
	YDE-041	4.87±1.19 ^a	5.01±1.26 ^b	6.25±2.15 ^b
	YDE-042	4.83±0.84 ^a	6.30±1.08 ^{bd}	7.97±1.48 ^{bd}
	YDE-043	4.86±0.81 ^a	5.90±1.06 ^{bd}	8.16±1.42 ^{bd}

Fig. 12

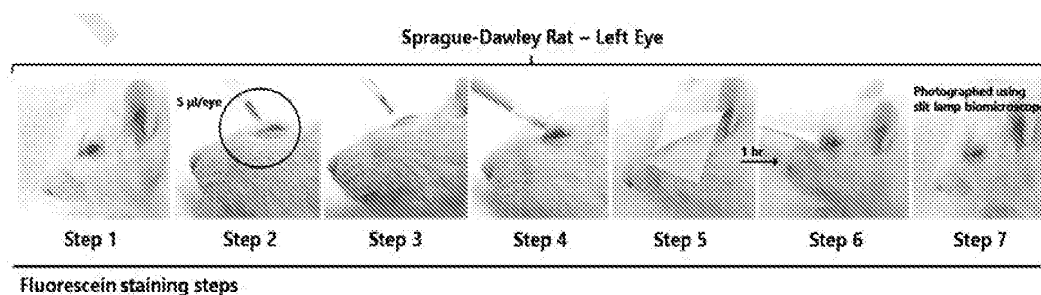


Fig. 13

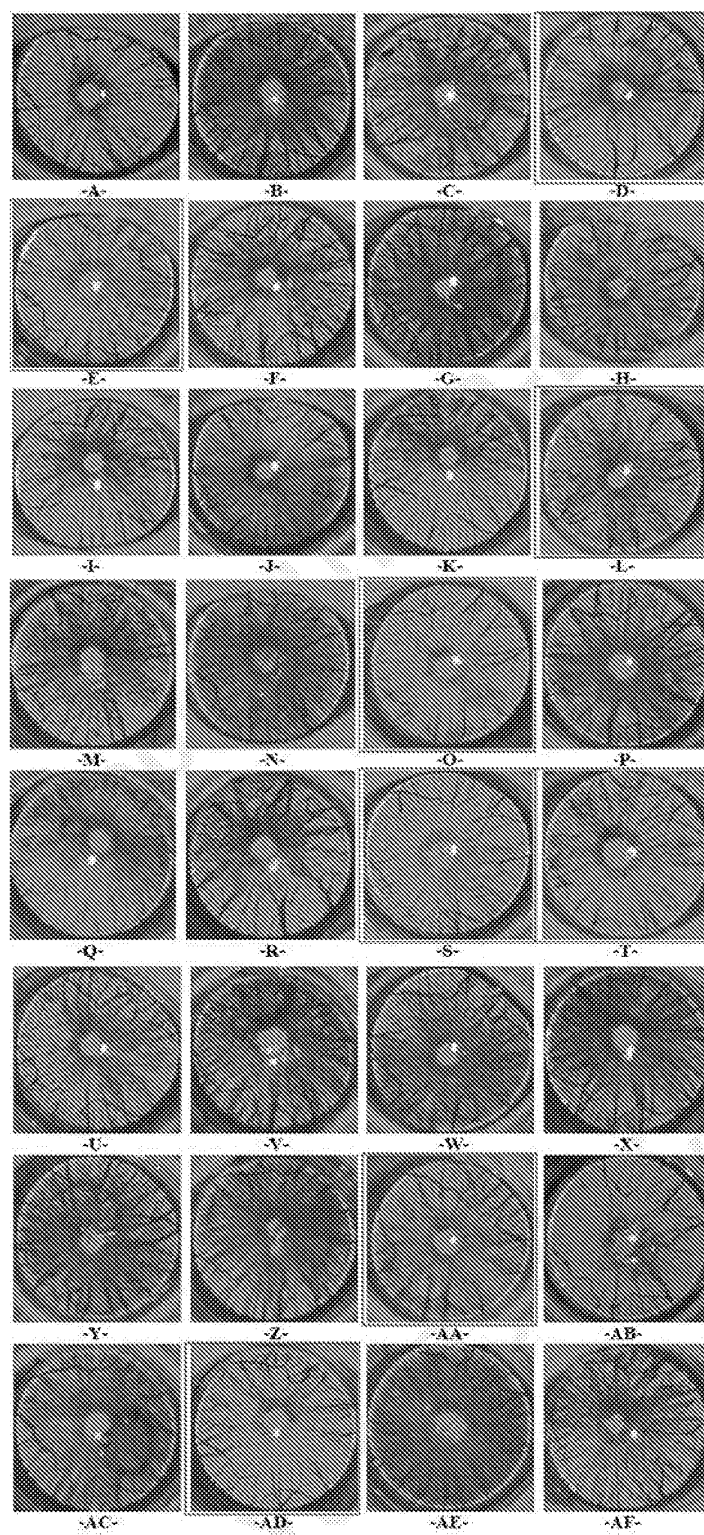


Fig. 14

Groups	Items	Fluorescent stained cornea areas (%)
Control		
	Sham	2.62±1.71
	ELGE	57.34±12.83 ^a
Reference		
	DS	35.40±13.32 ^a
Test materials (0.3% solutions)		
	YY-102	27.48±14.37 ^{ac}
	YDE-01	25.49±11.62 ^{ac}
	YDE-02	38.26±11.25 ^{ac}
	YDE-03	40.45±6.46 ^{ac}
	YDE-04	35.05±11.74 ^{ac}
	YDE-05	37.98±11.53 ^{ac}
	YDE-06	33.23±13.26 ^{ac}
	YDE-07	32.79±10.77 ^{ac}
	YDE-08	20.32±11.87 ^{ac}
	YDE-09	41.50±7.86 ^{ac}
	YDE-10	49.29±12.06 ^a
	YDE-11	18.11±11.61 ^{ac}
	YDE-12	31.01±11.38 ^{ac}
	YDE-13	32.24±7.84 ^{ac}
	YDE-14	31.15±10.87 ^{ac}
	YDE-15	15.95±6.48 ^{ac}
	YDE-16	24.57±10.34 ^{ac}
	YDE-17	39.76±7.42 ^{ac}
	YDE-18	38.19±10.96 ^{ac}
	YDE-19	40.39±12.57 ^{ac}
	YDE-20	47.84±13.47 ^a
	YDE-21	37.00±10.49 ^{ac}
	YDE-22	47.82±10.01 ^a
	YDE-23	26.51±8.18 ^{ac}
	YDE-24	30.63±10.41 ^{ac}
	YDE-25	47.10±11.45 ^a
	YDE-26	22.63±11.23 ^{ac}
	YDE-27	50.24±11.94 ^a
	YDE-28	41.17±10.25 ^{ac}

Fig. 15

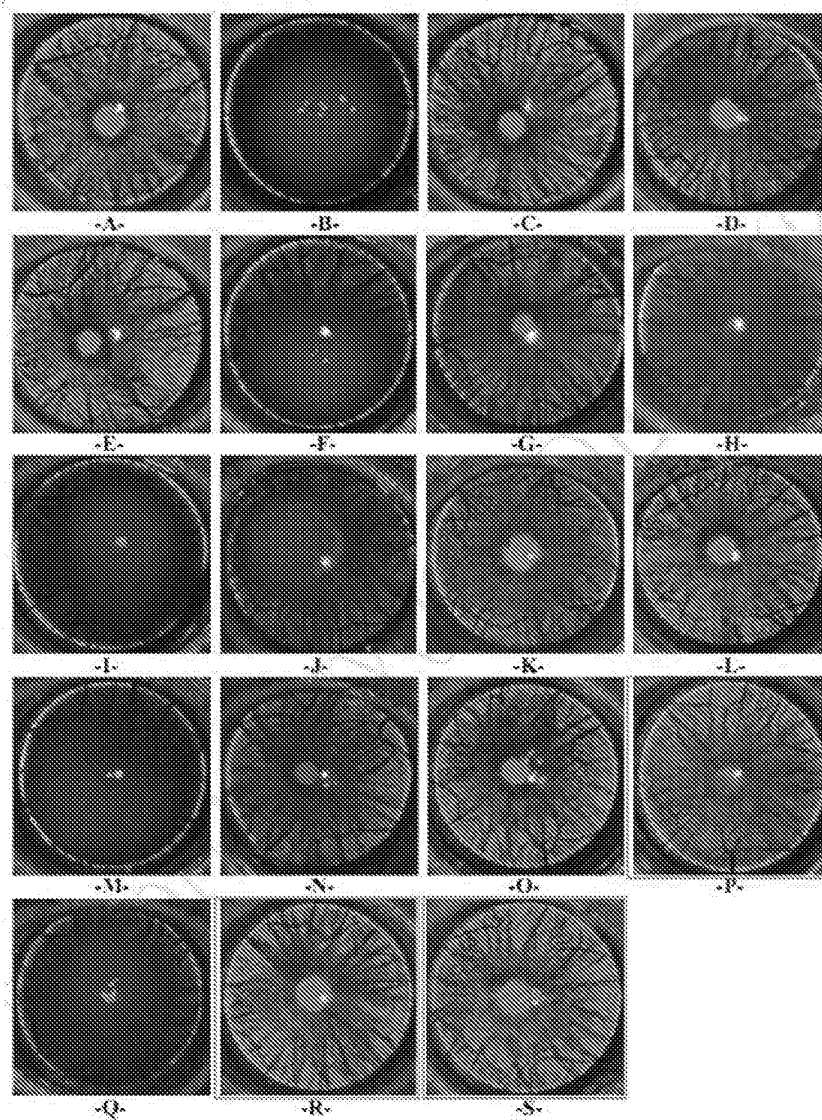


Fig. 16

Groups	Items Fluorescent stained cornea areas (%)
Control	
Sham	1.53±0.65
ELGE	66.71±10.02 ^b
Reference	
DS	30.03±10.97 ^{bd}
YY-101	33.80±11.11 ^{bd}
YY-102	27.89±7.10 ^{bd}
Test materials (0.3% solutions)	
YDE-029	63.45±11.57 ^b
YDE-030	30.60±13.61 ^{bd}
YDE-031	33.35±11.01 ^{bd}
YDE-032	58.90±19.81 ^b
YDE-033	60.55±21.22 ^b
YDE-034	32.17±12.94 ^{bd}
YDE-035	27.62±6.51 ^{bd}
YDE-036	57.87±22.91 ^b
YDE-037	36.30±9.75 ^{bd}
YDE-039	29.94±11.40 ^{bd}
YDE-040	18.33±9.41 ^{bd}
YDE-041	46.38±26.65 ^b
YDE-042	20.72±11.37 ^{bd}
YDE-043	19.04±7.36 ^{bd}

Fig. 17

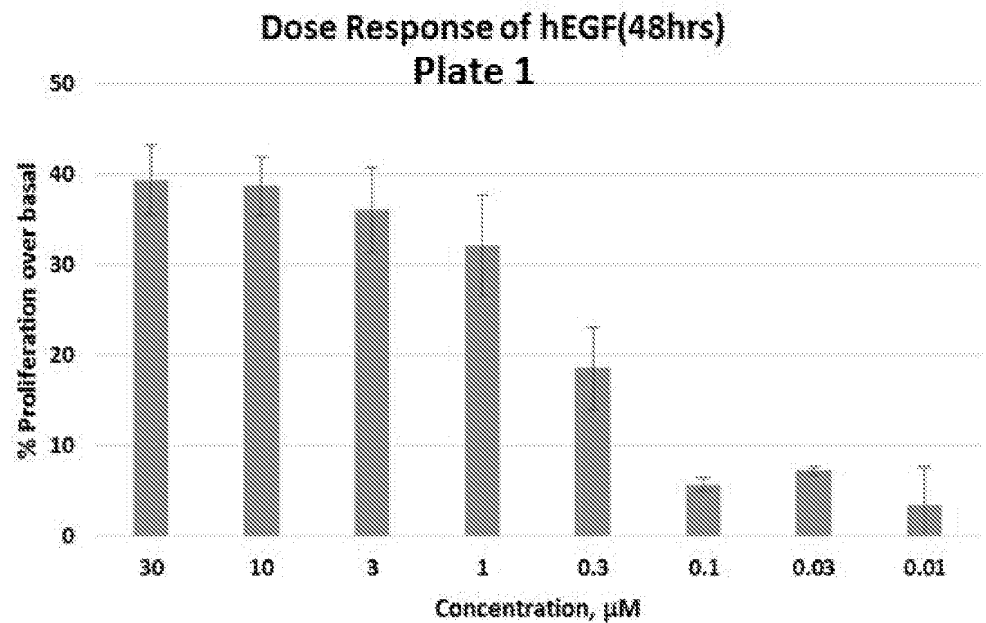


Fig. 18

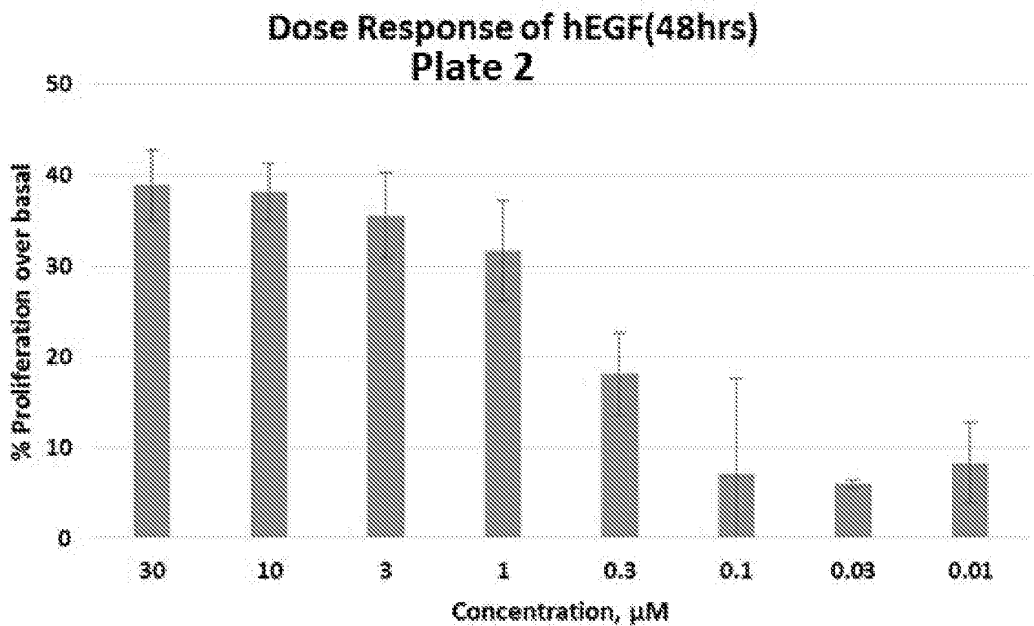


Fig. 19

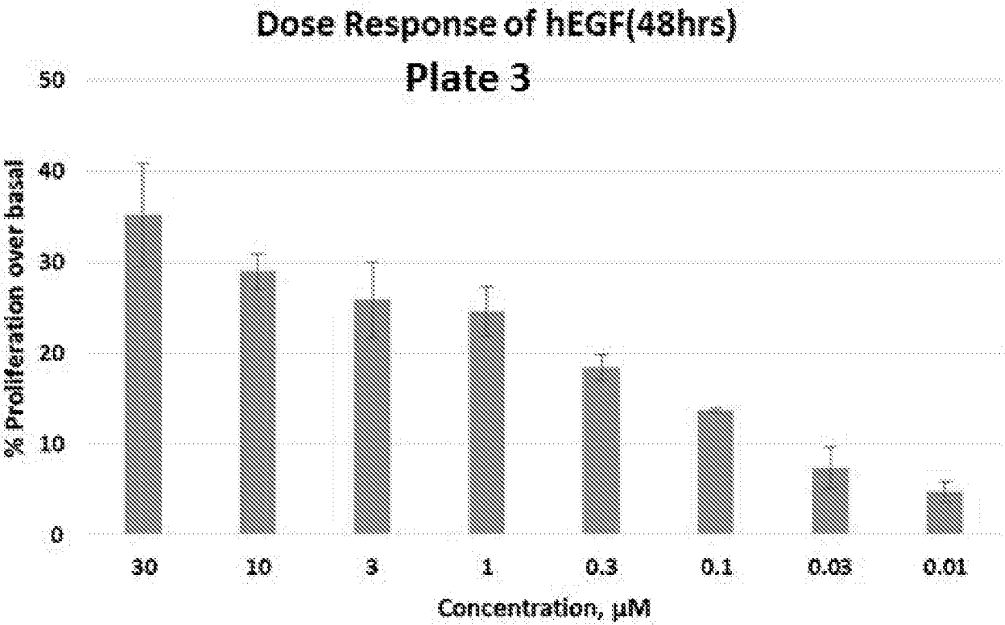


Fig. 20

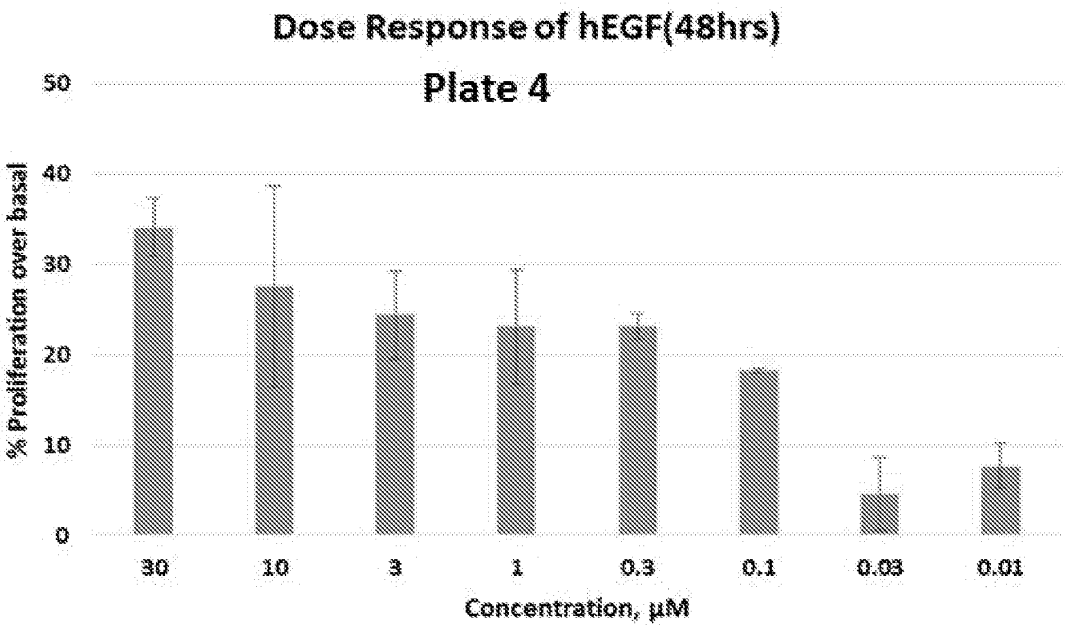


Fig. 21

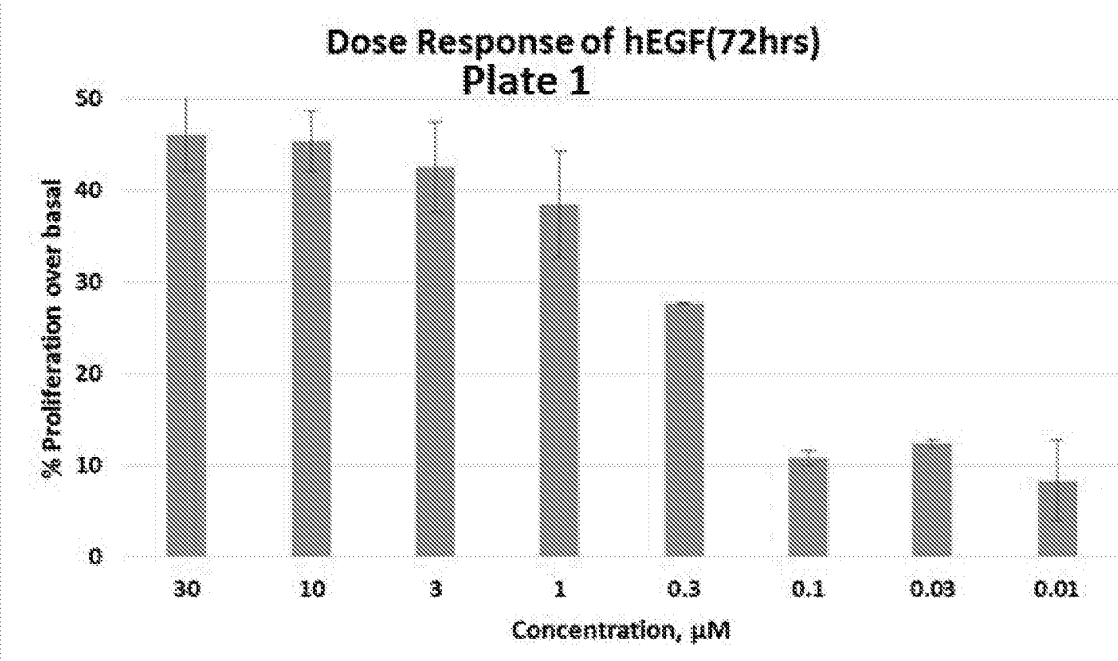


Fig. 22

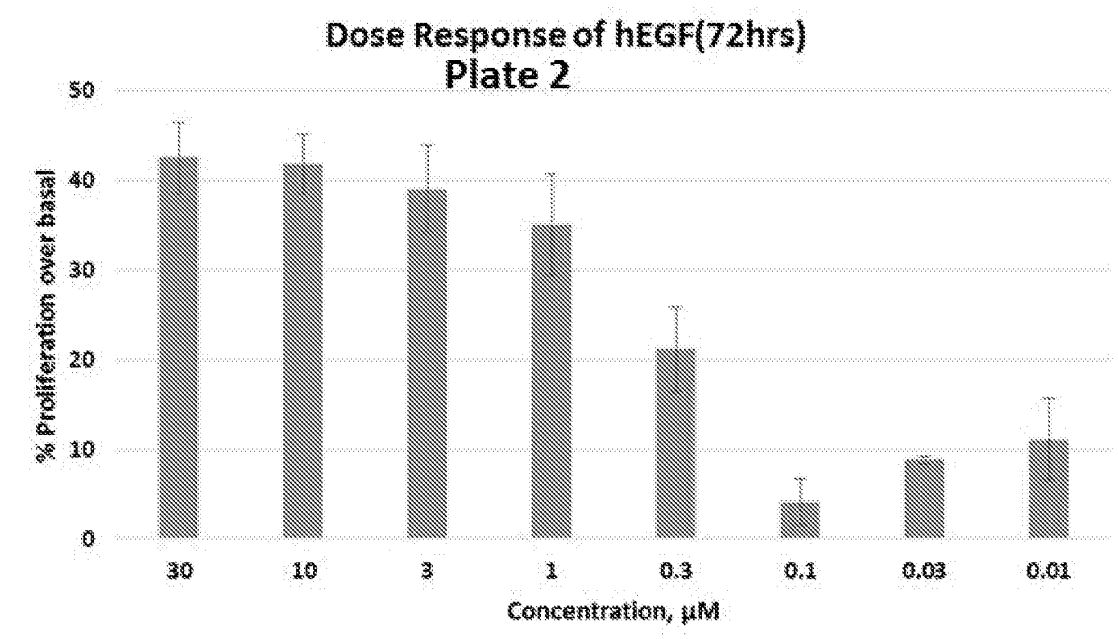


Fig. 23

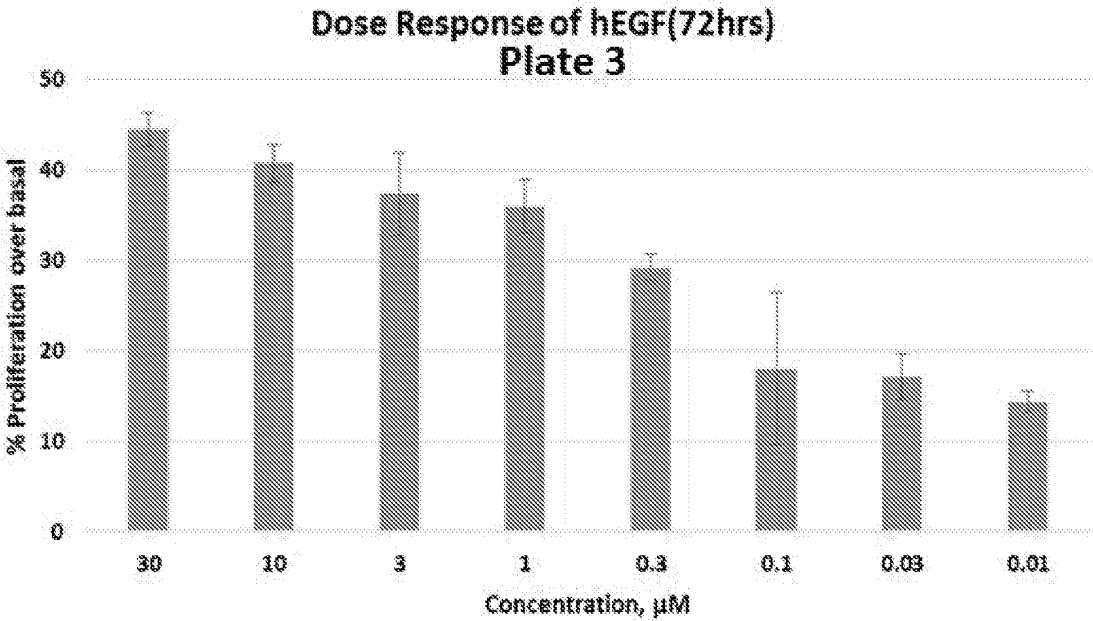


Fig. 24

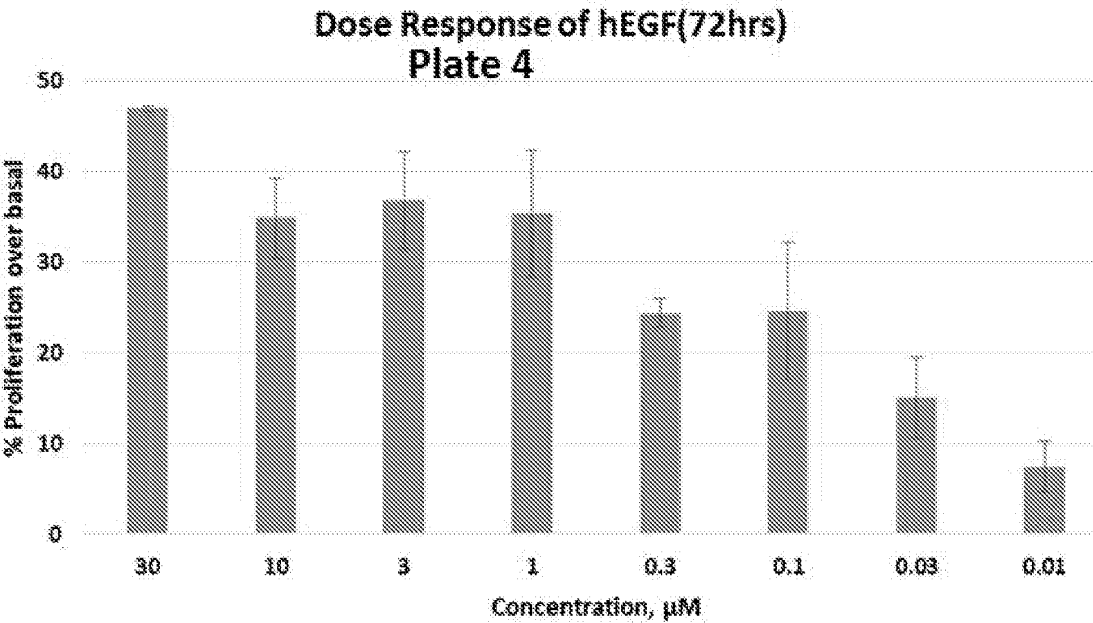


Fig. 25

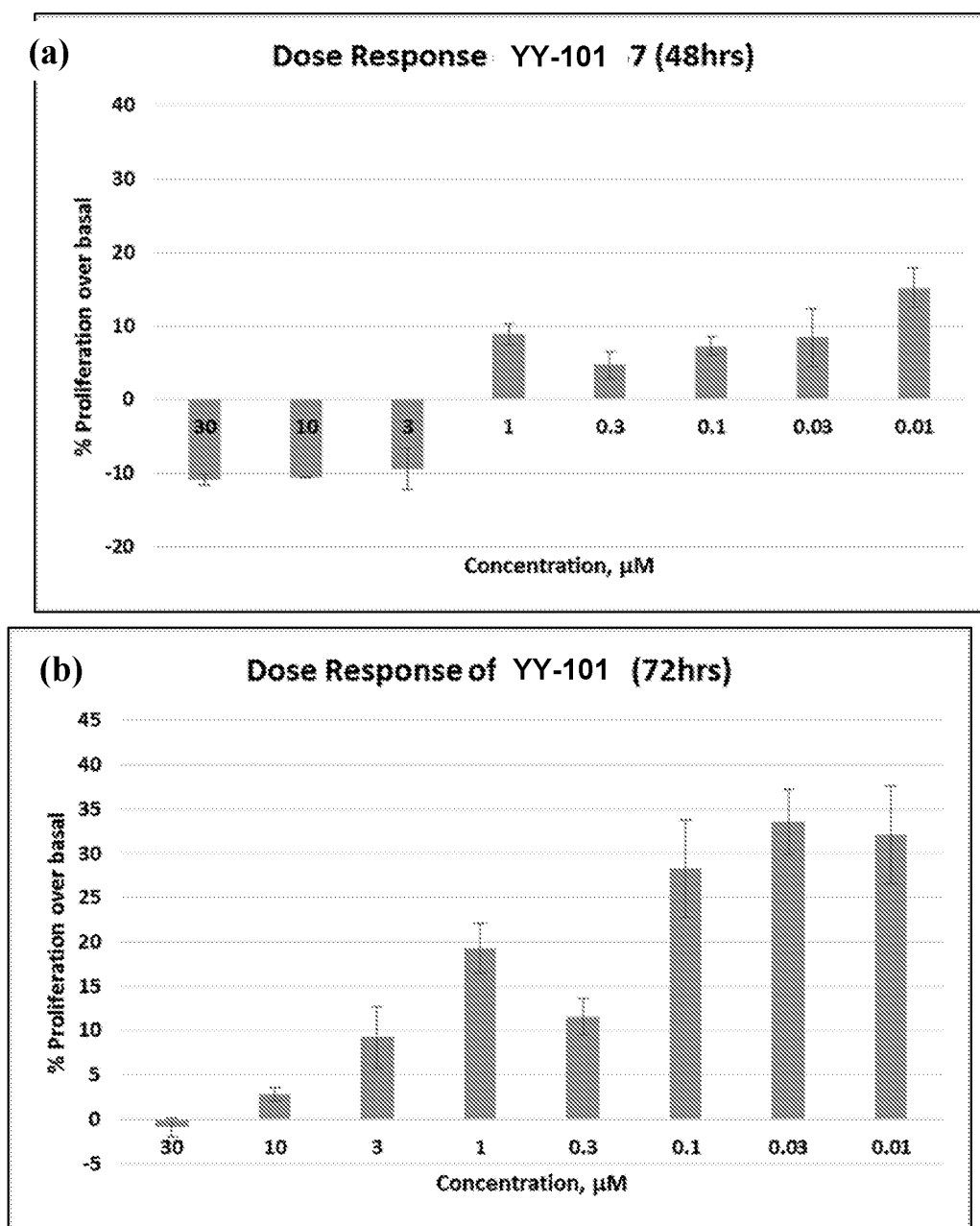


Fig. 26

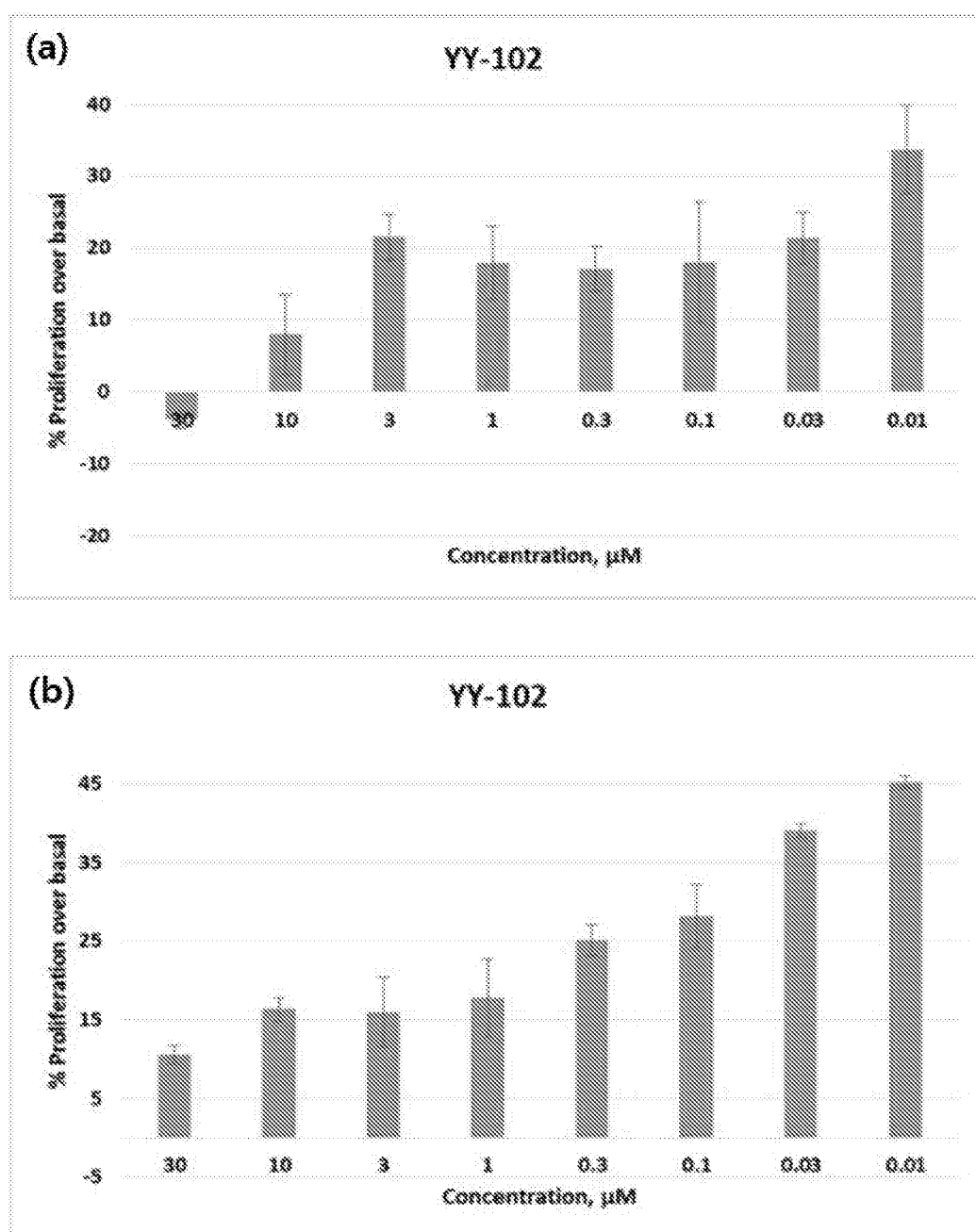


Fig. 27

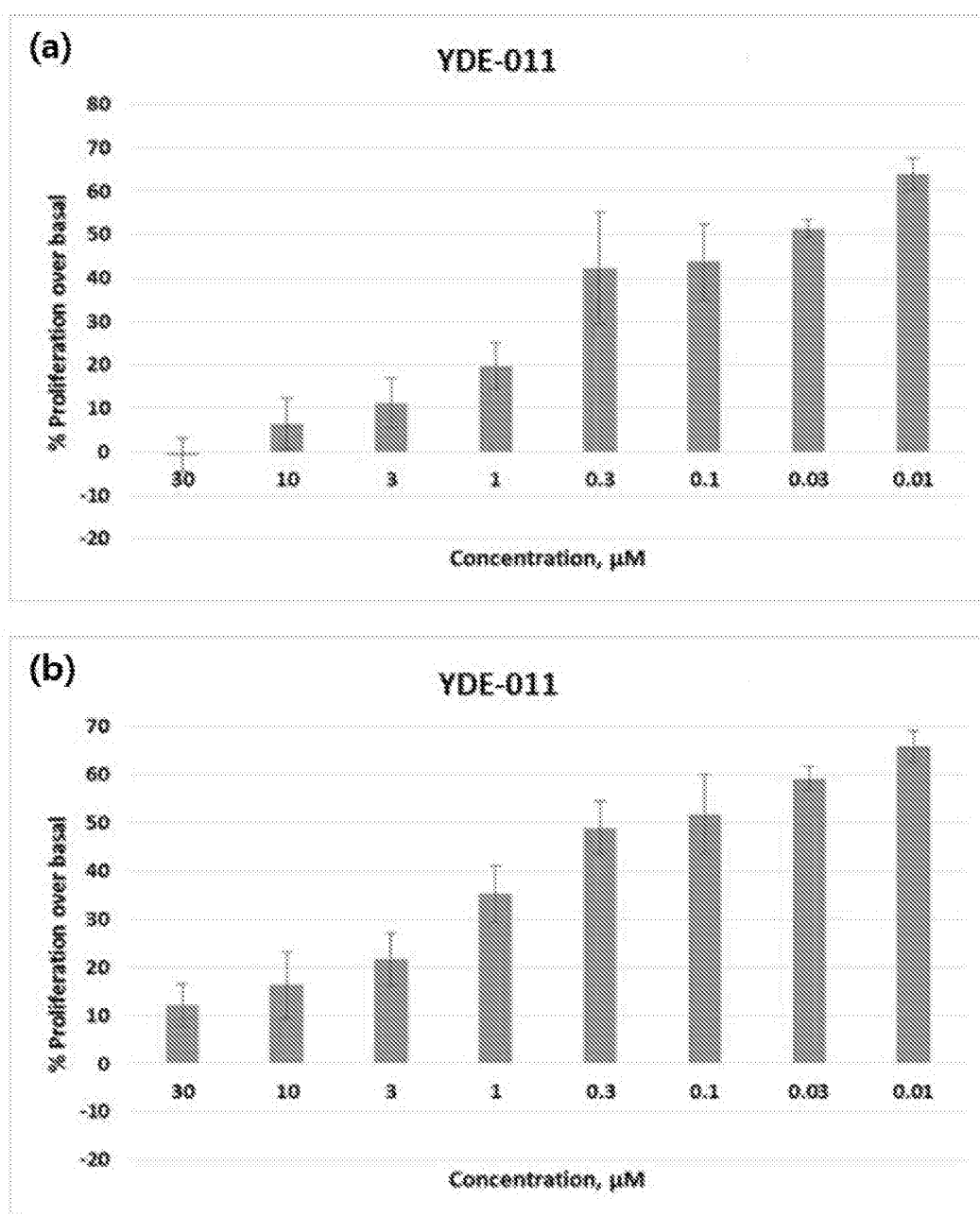


Fig. 28

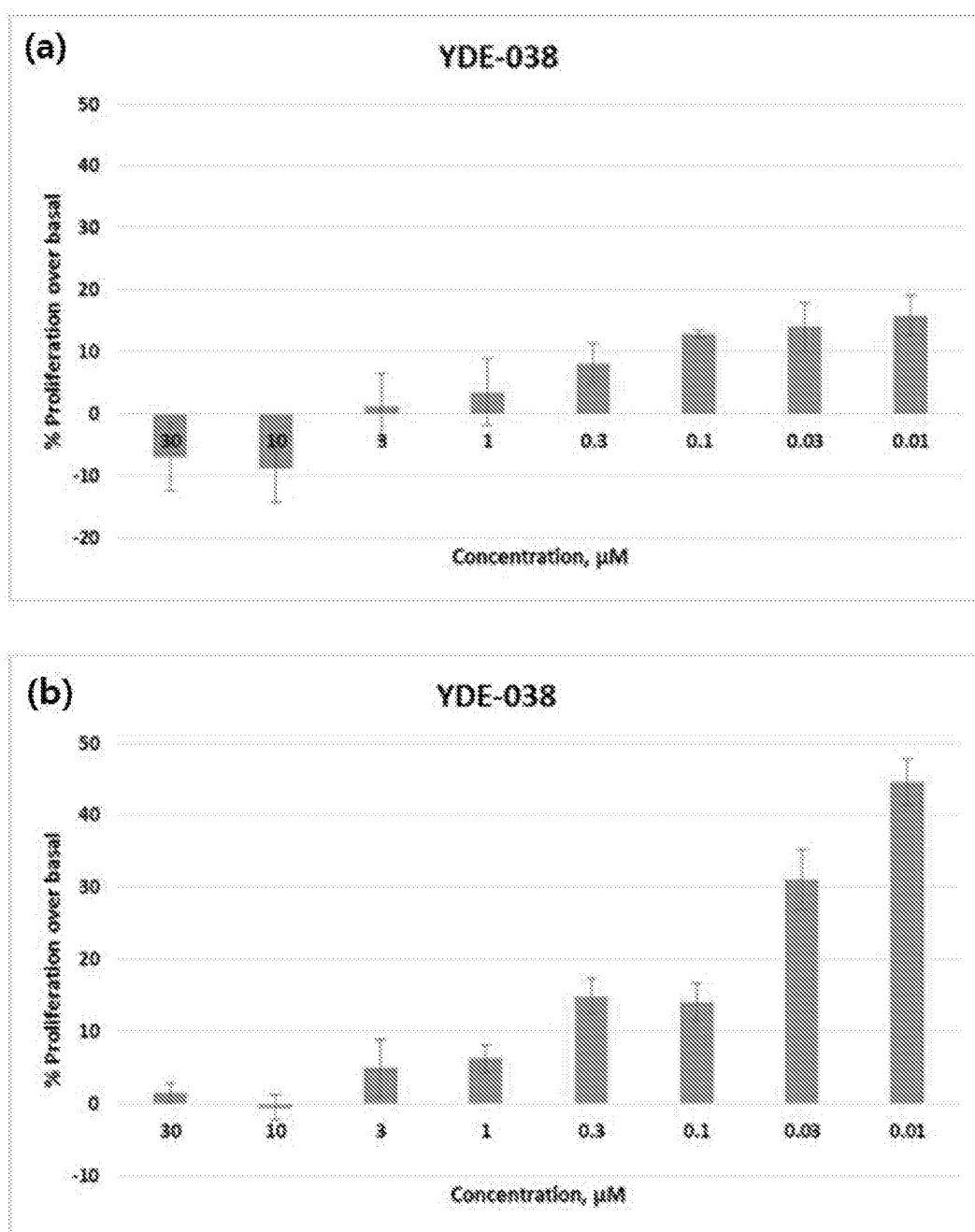


Fig. 29

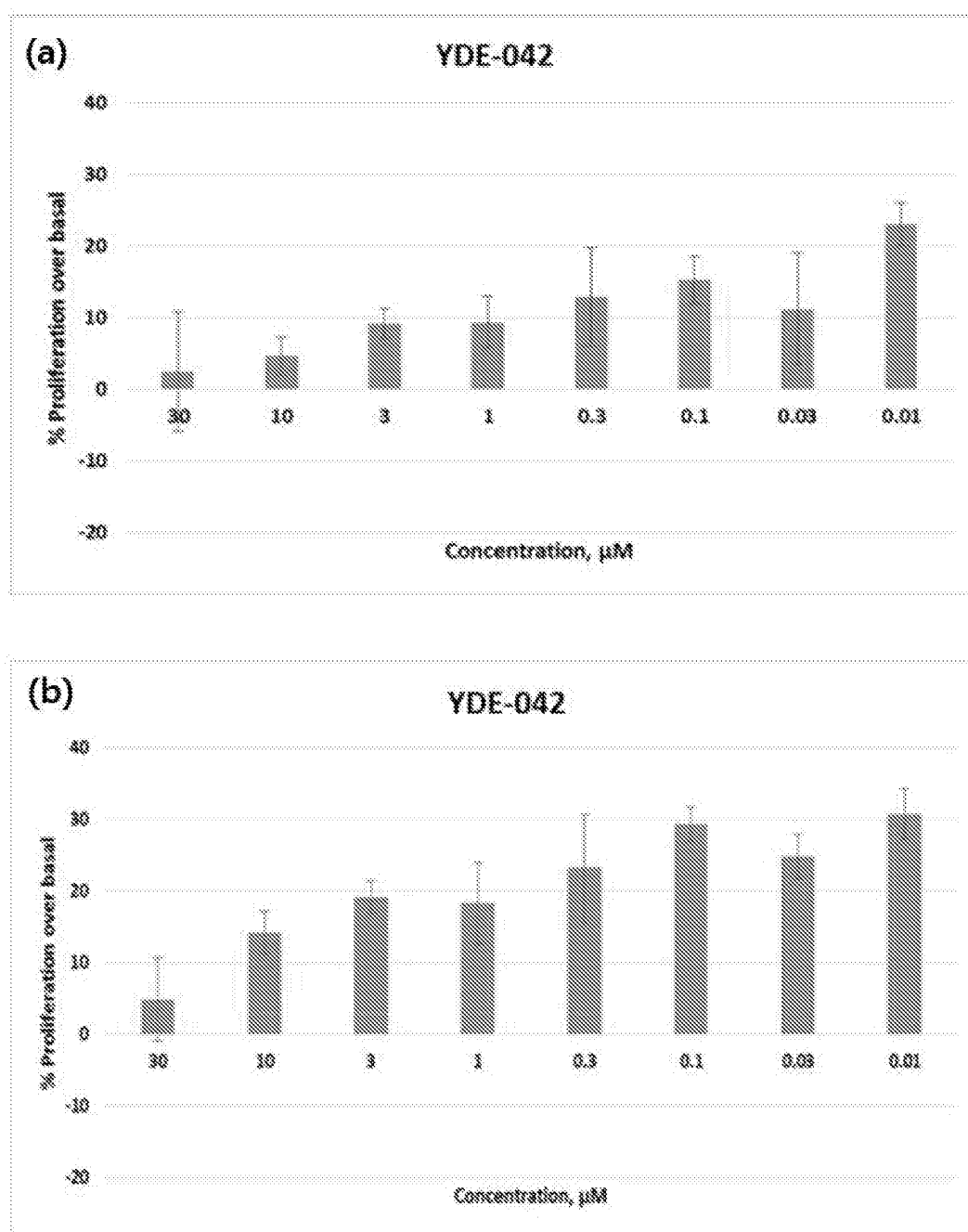


Fig. 30

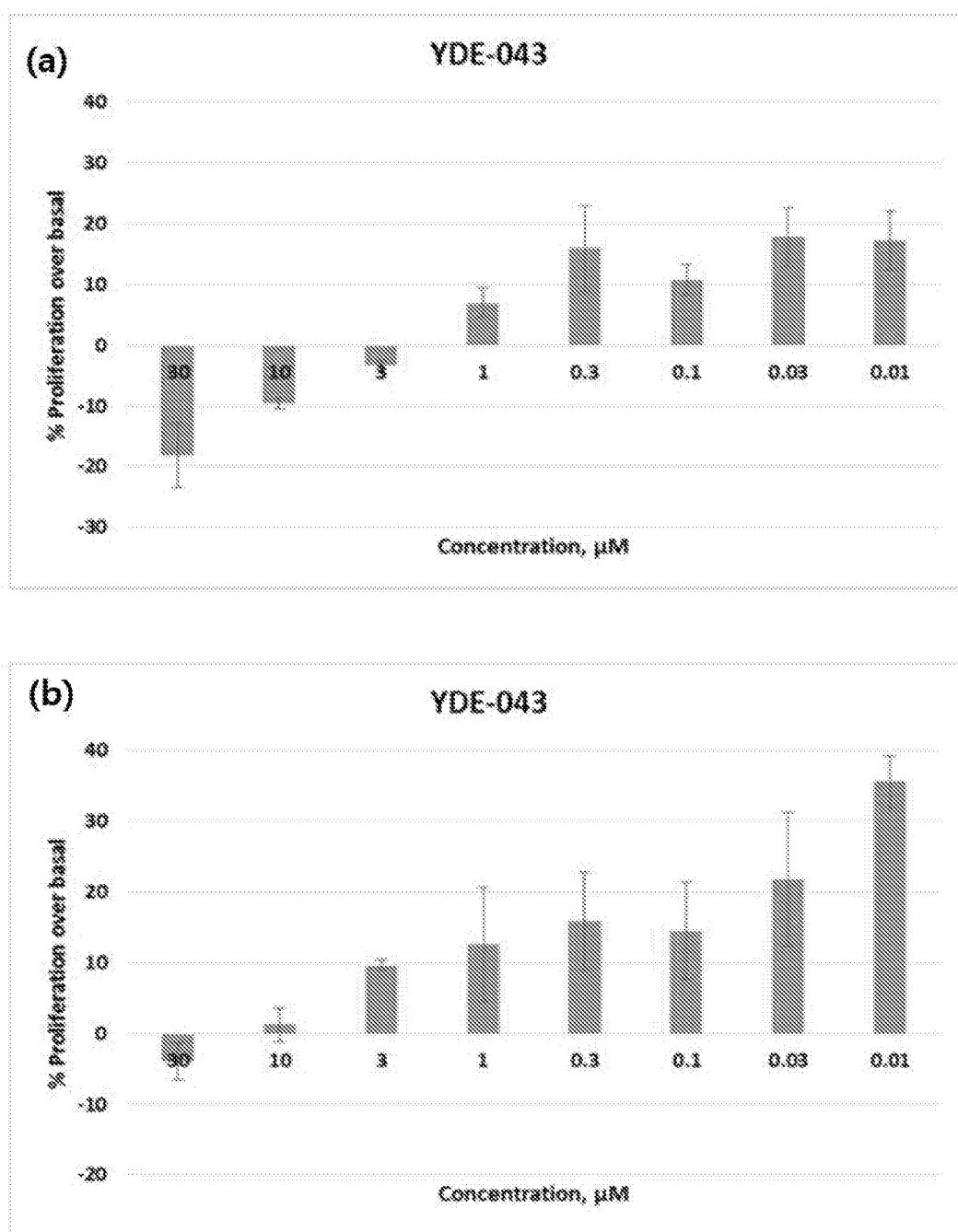


Fig. 31

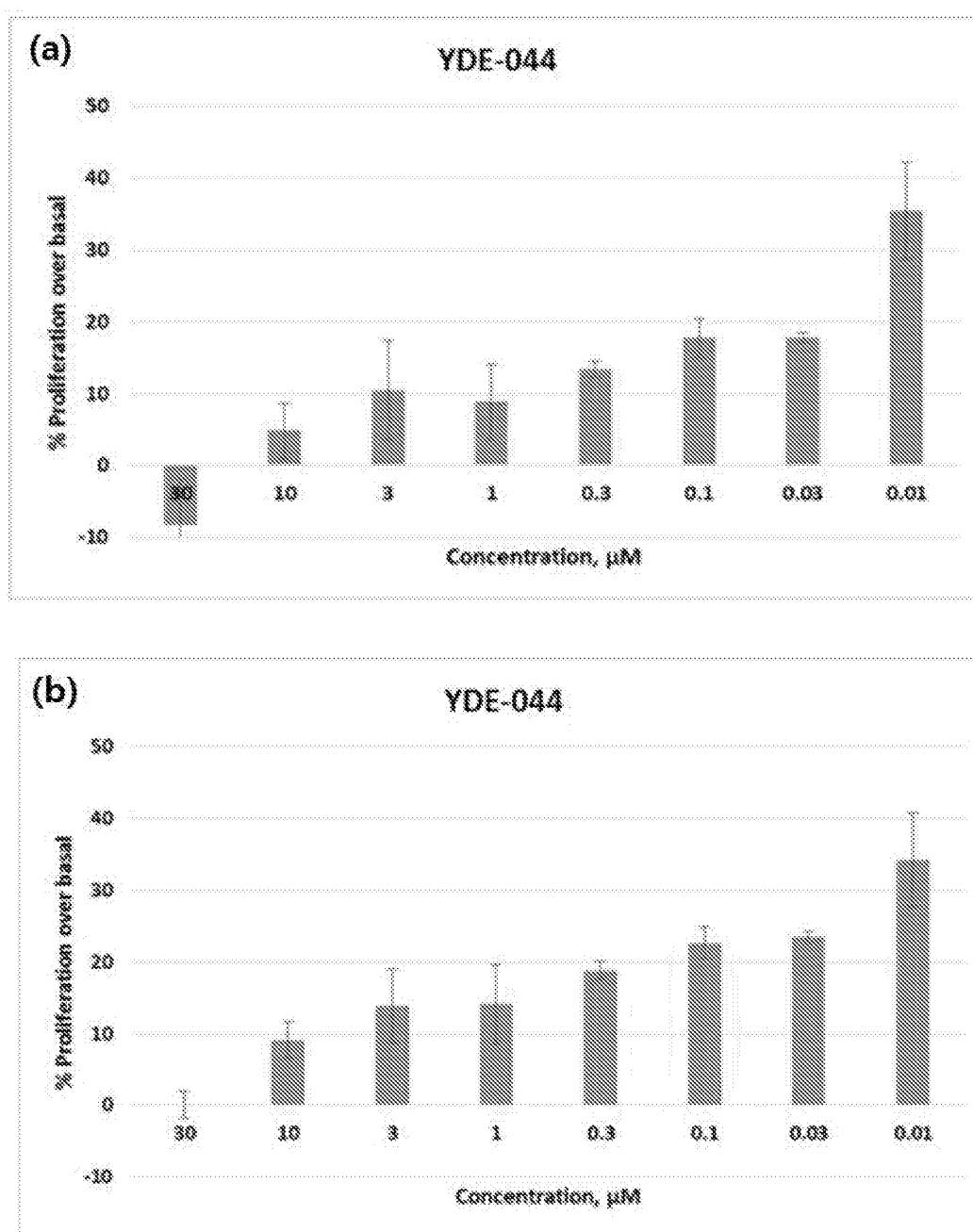


Fig. 32

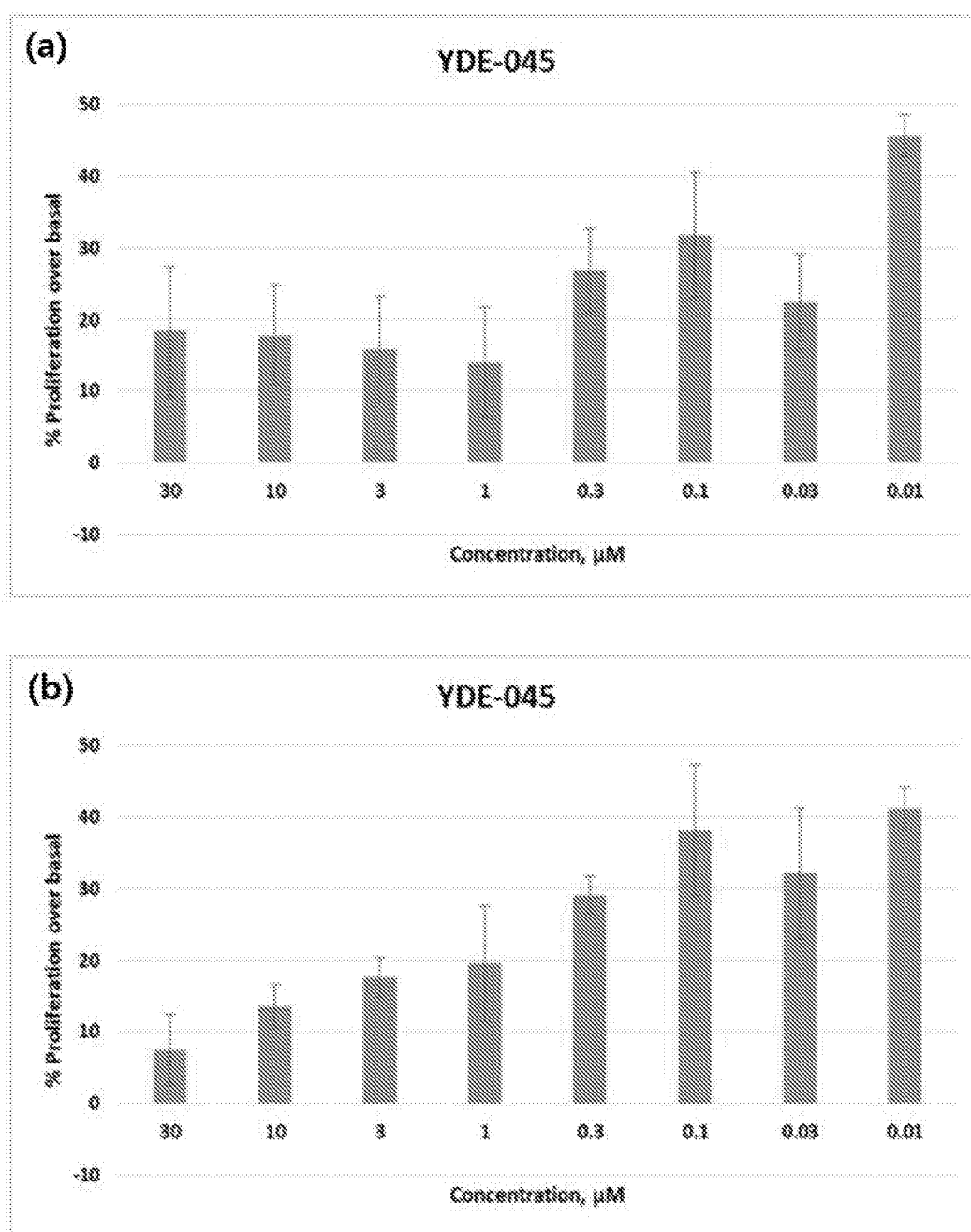


Fig. 33

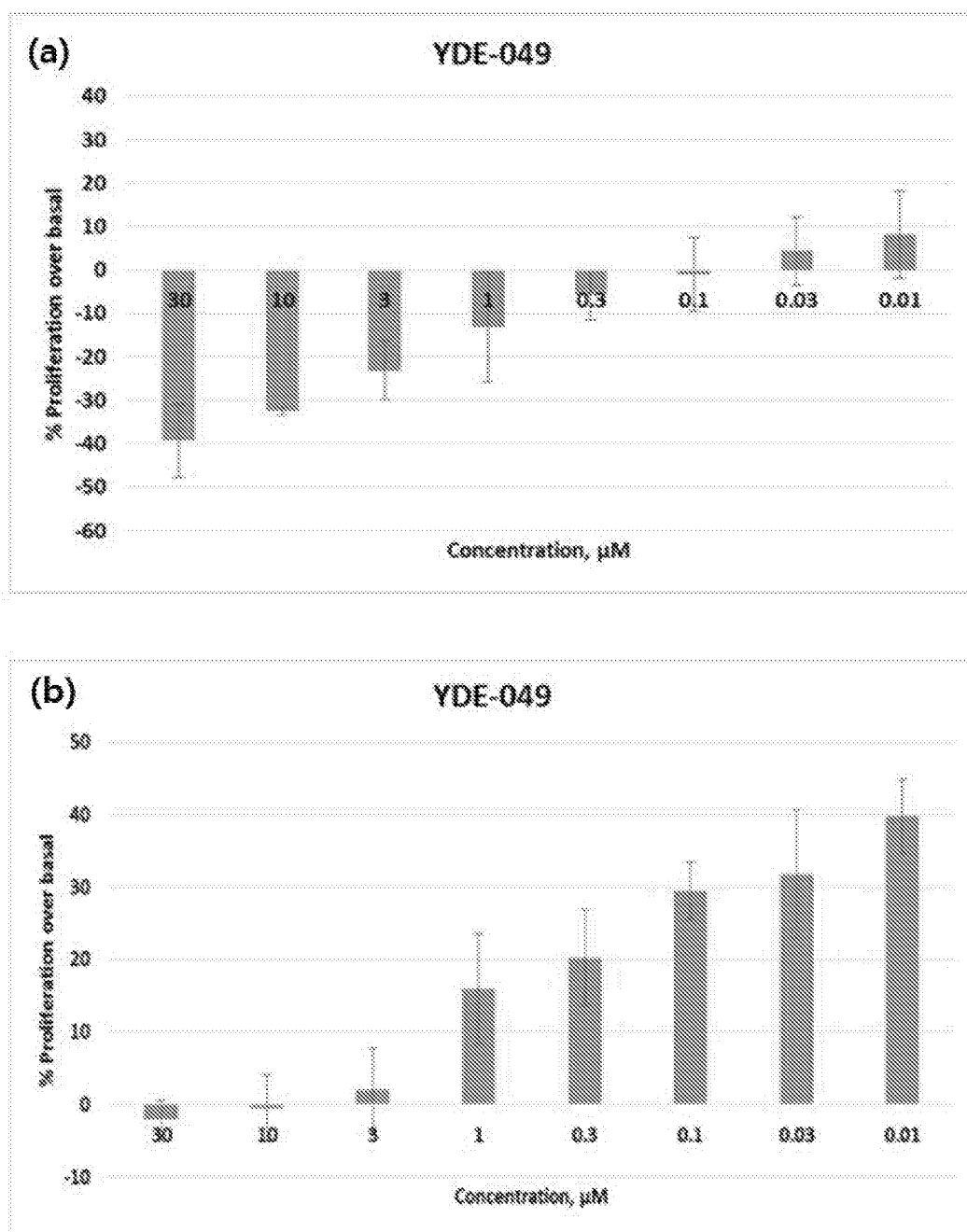


Fig. 34

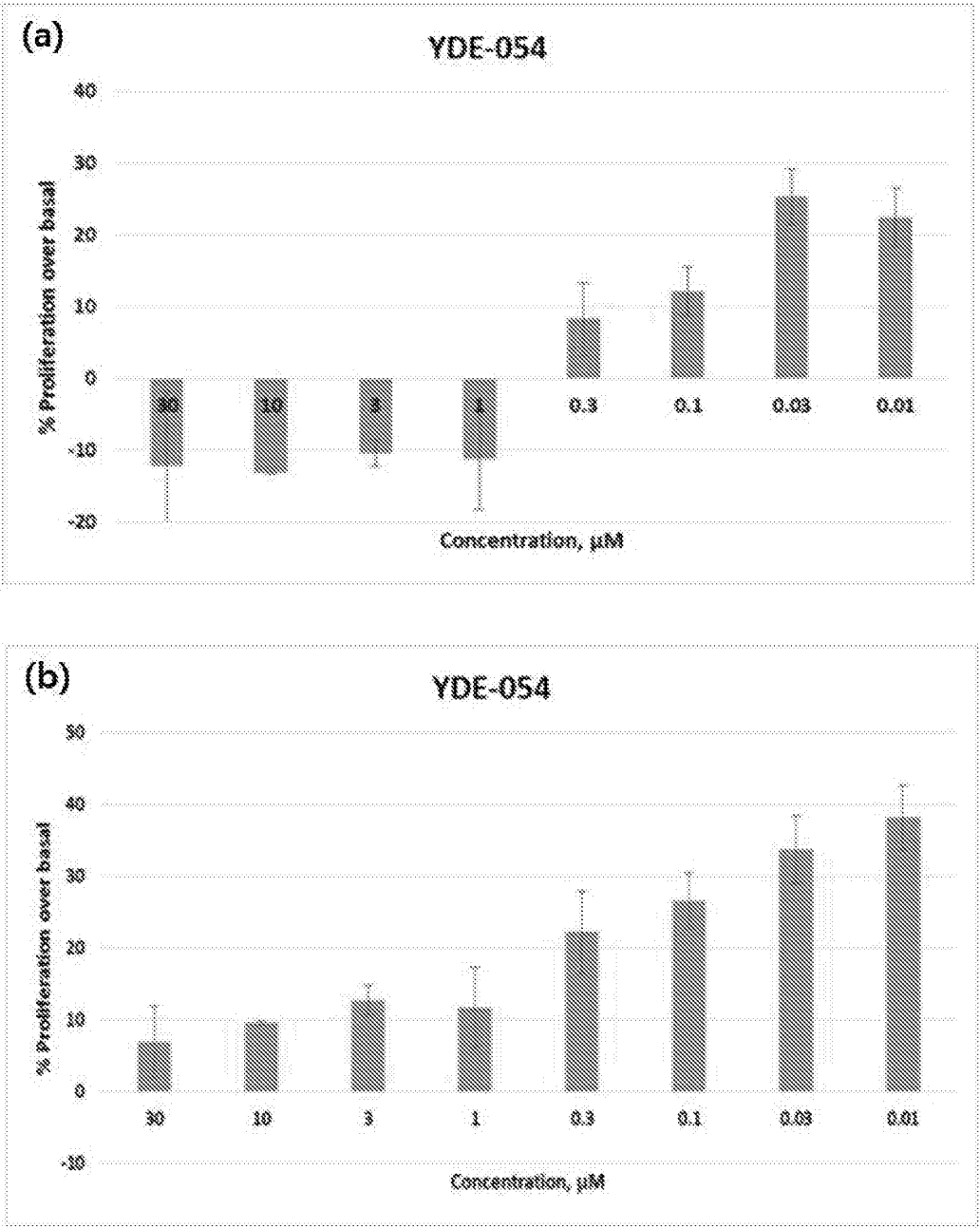


Fig. 35

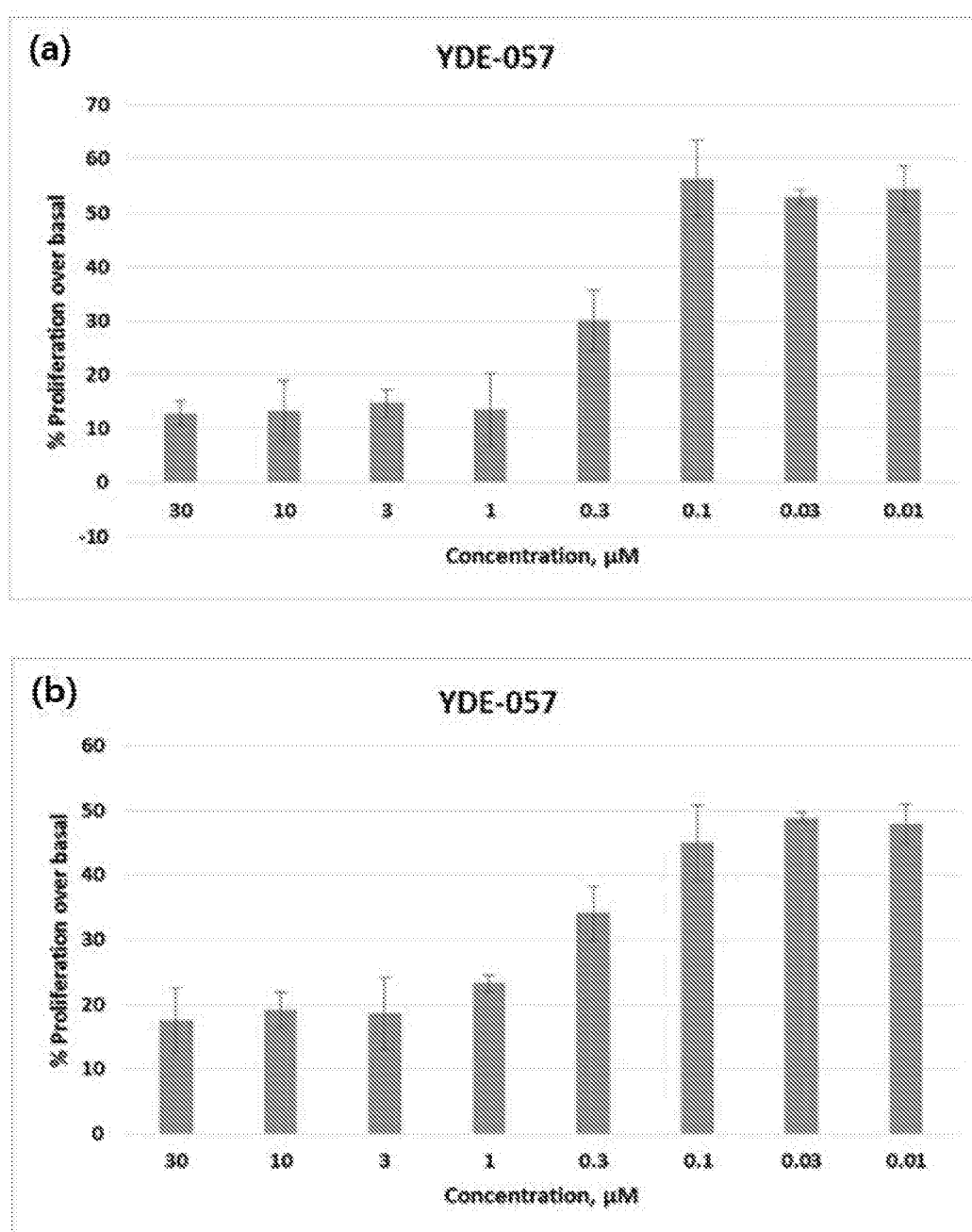


Fig. 36

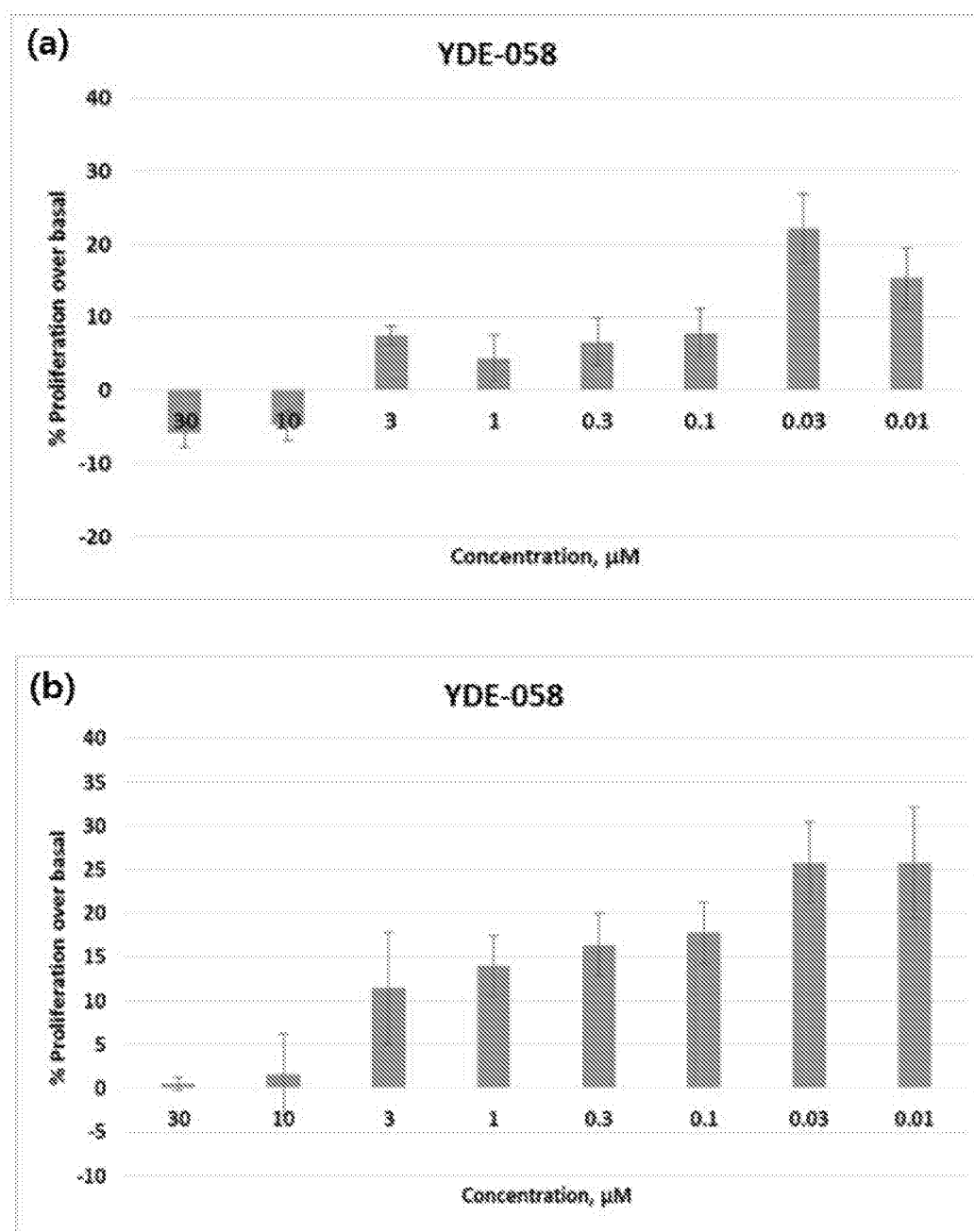


Fig. 37

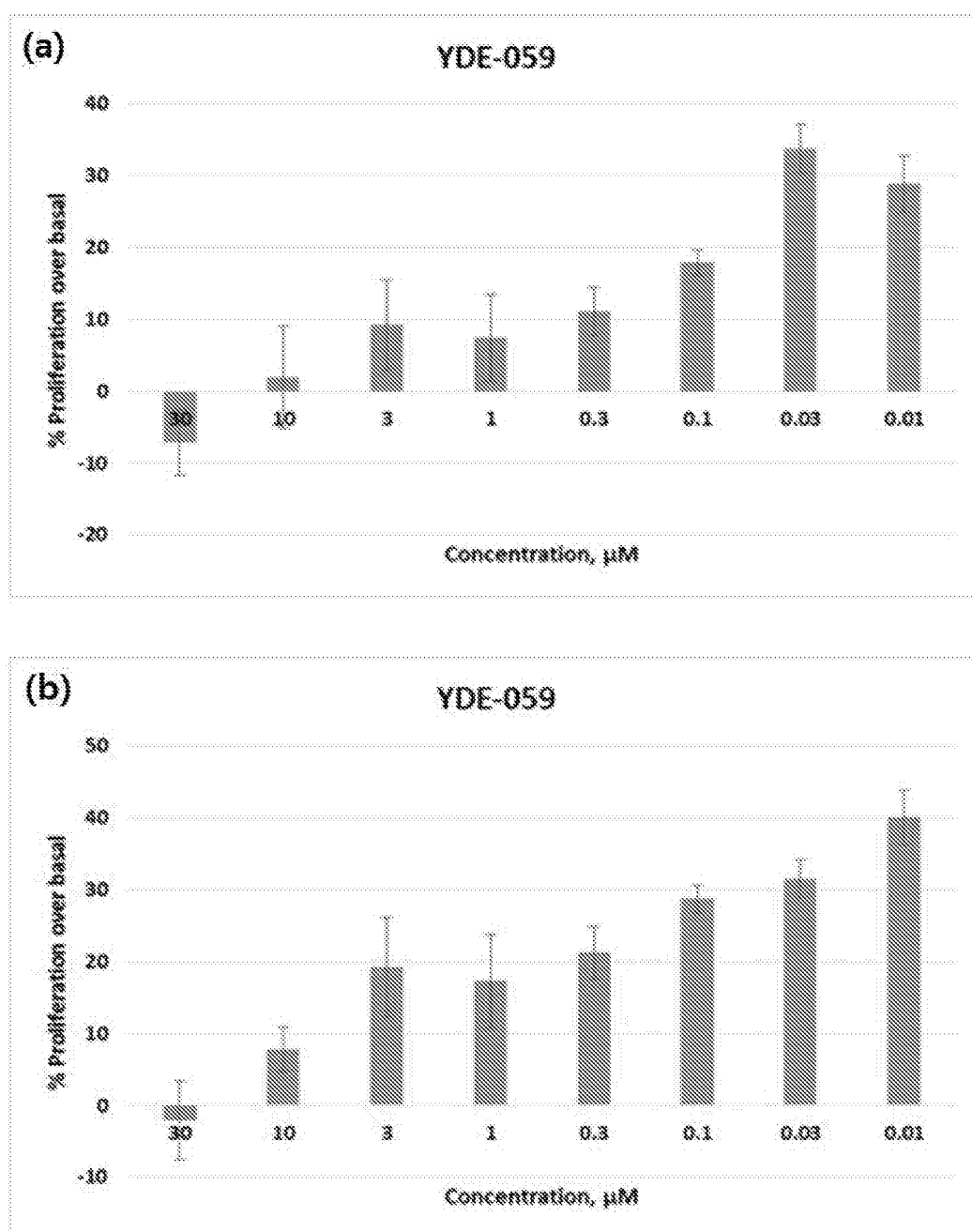


Fig. 38

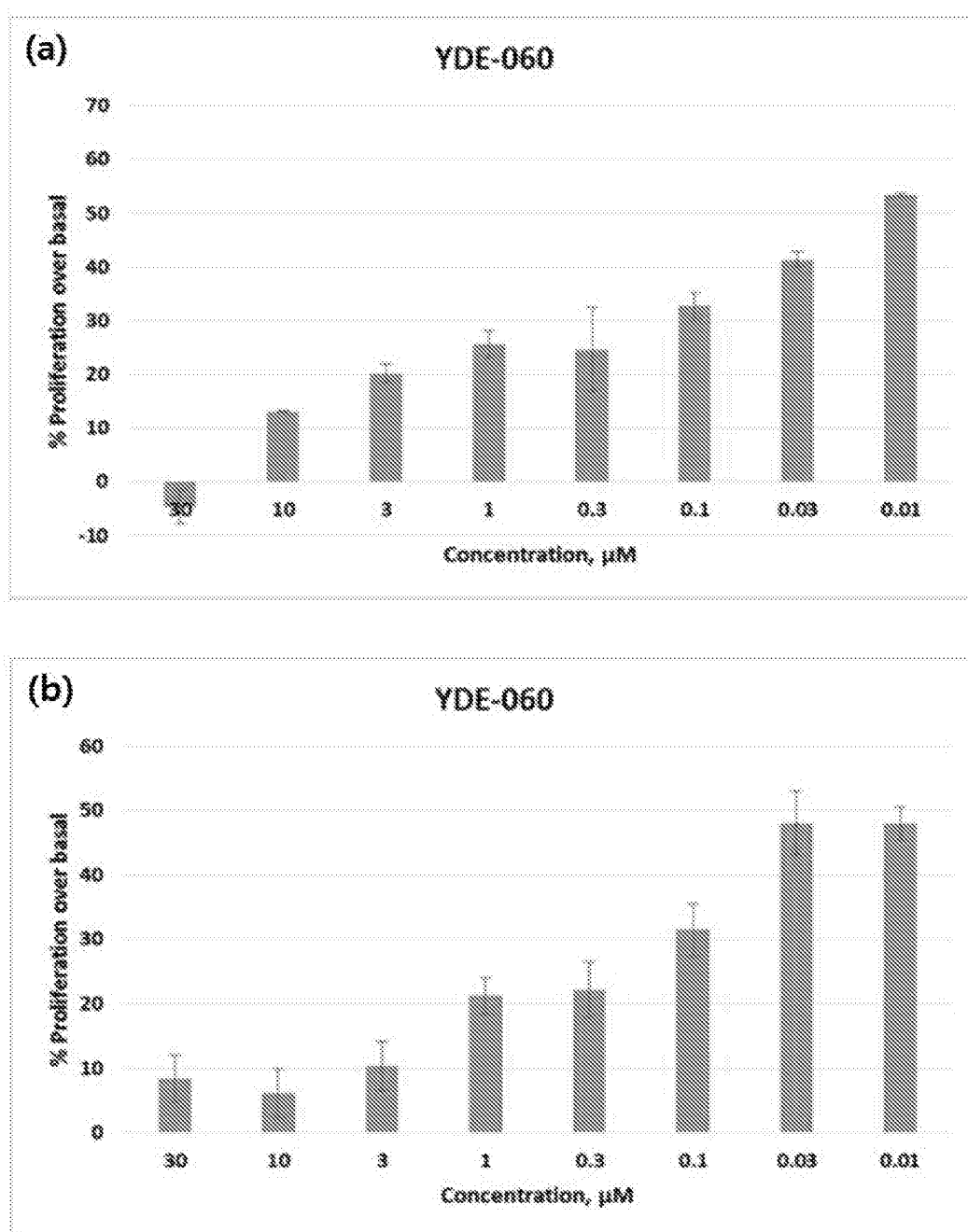


Fig. 39

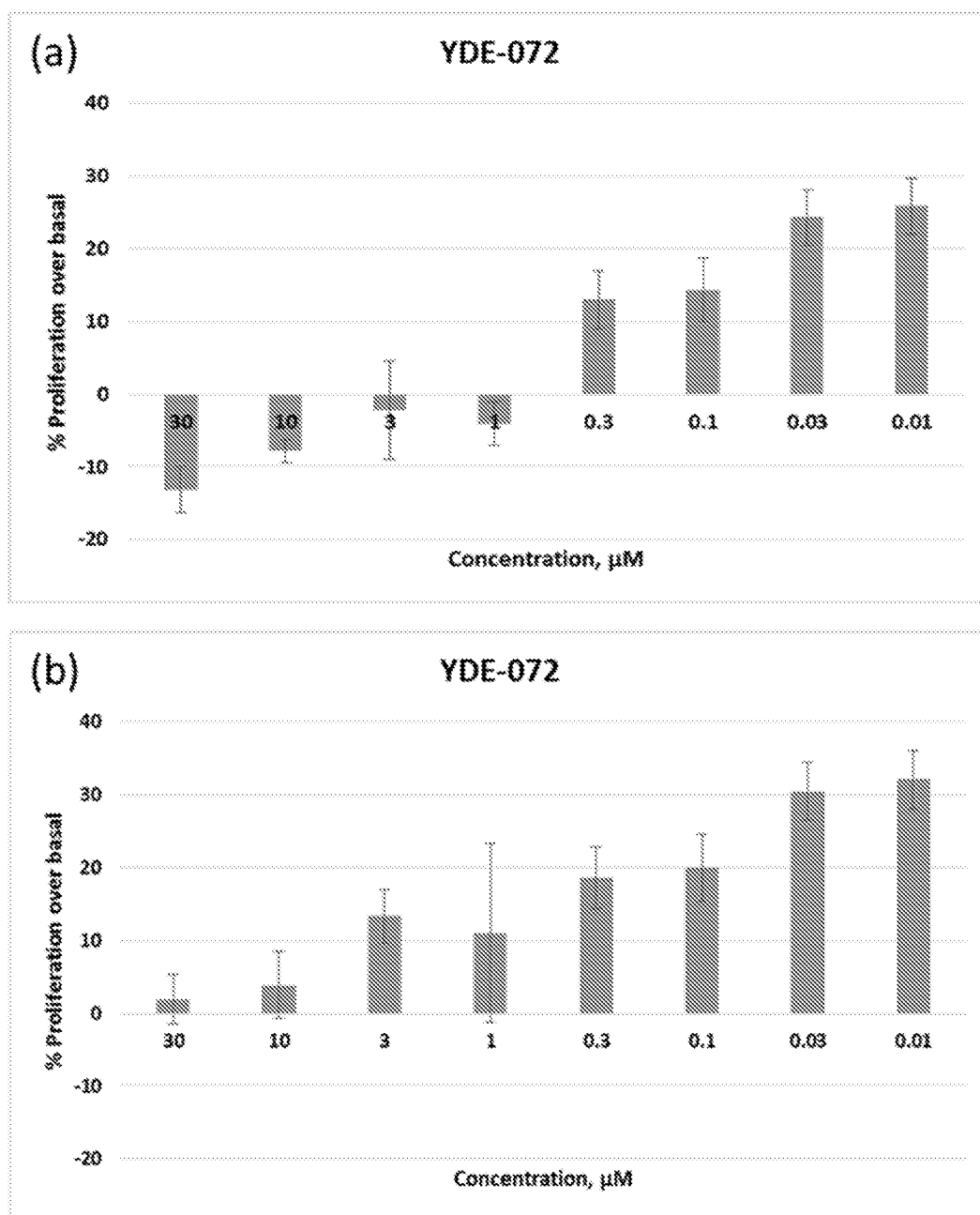


Fig. 40

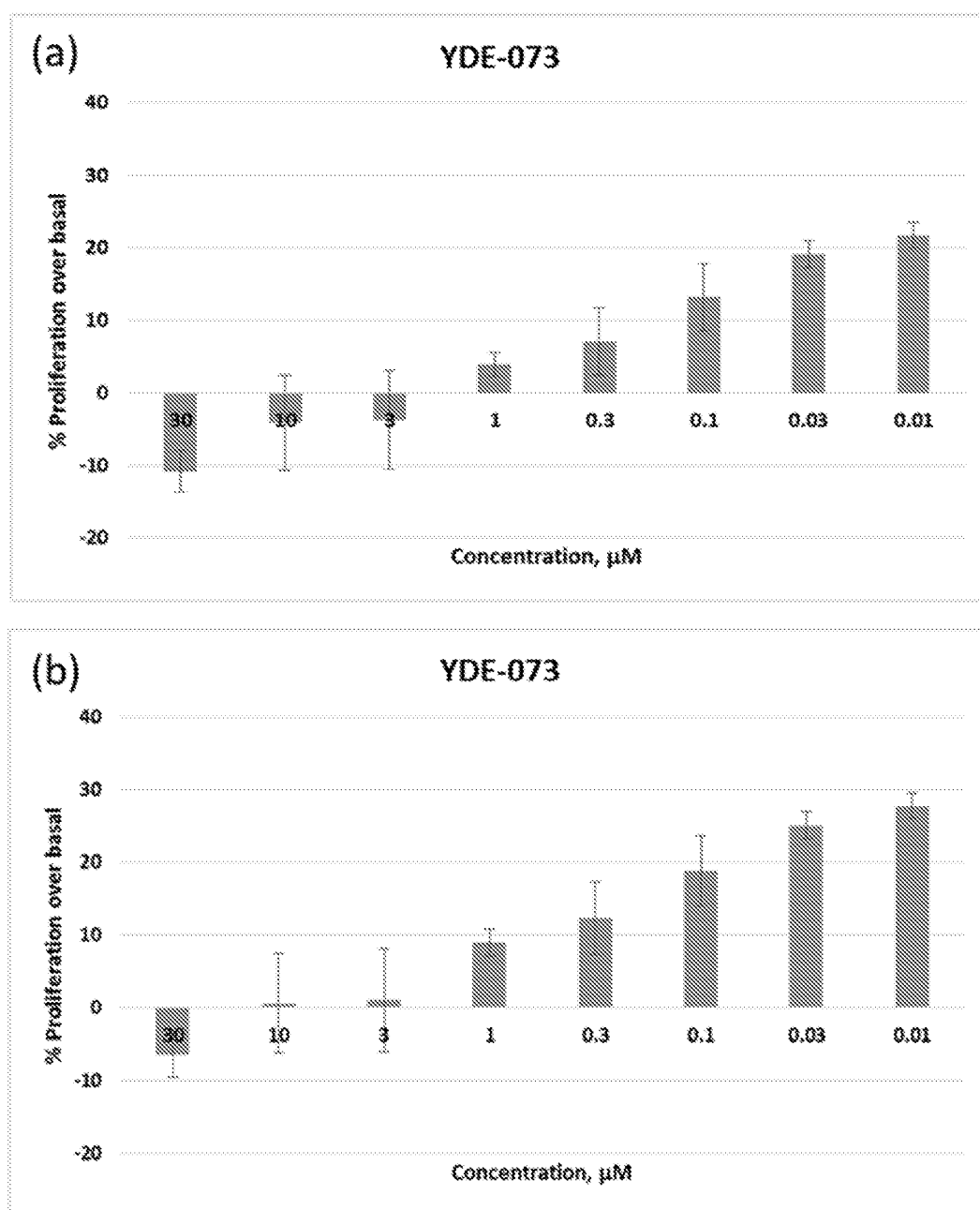


Fig. 41

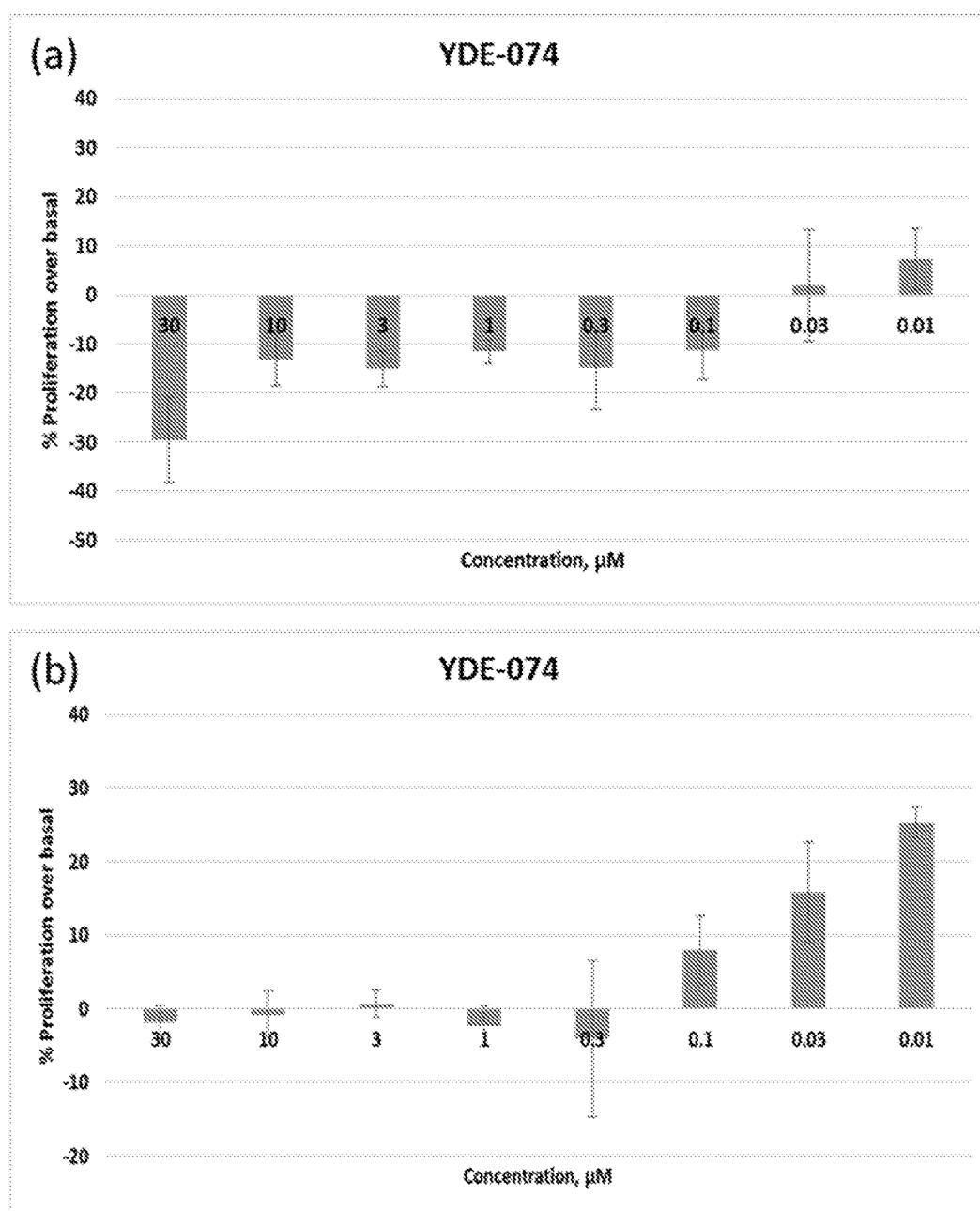


Fig. 42

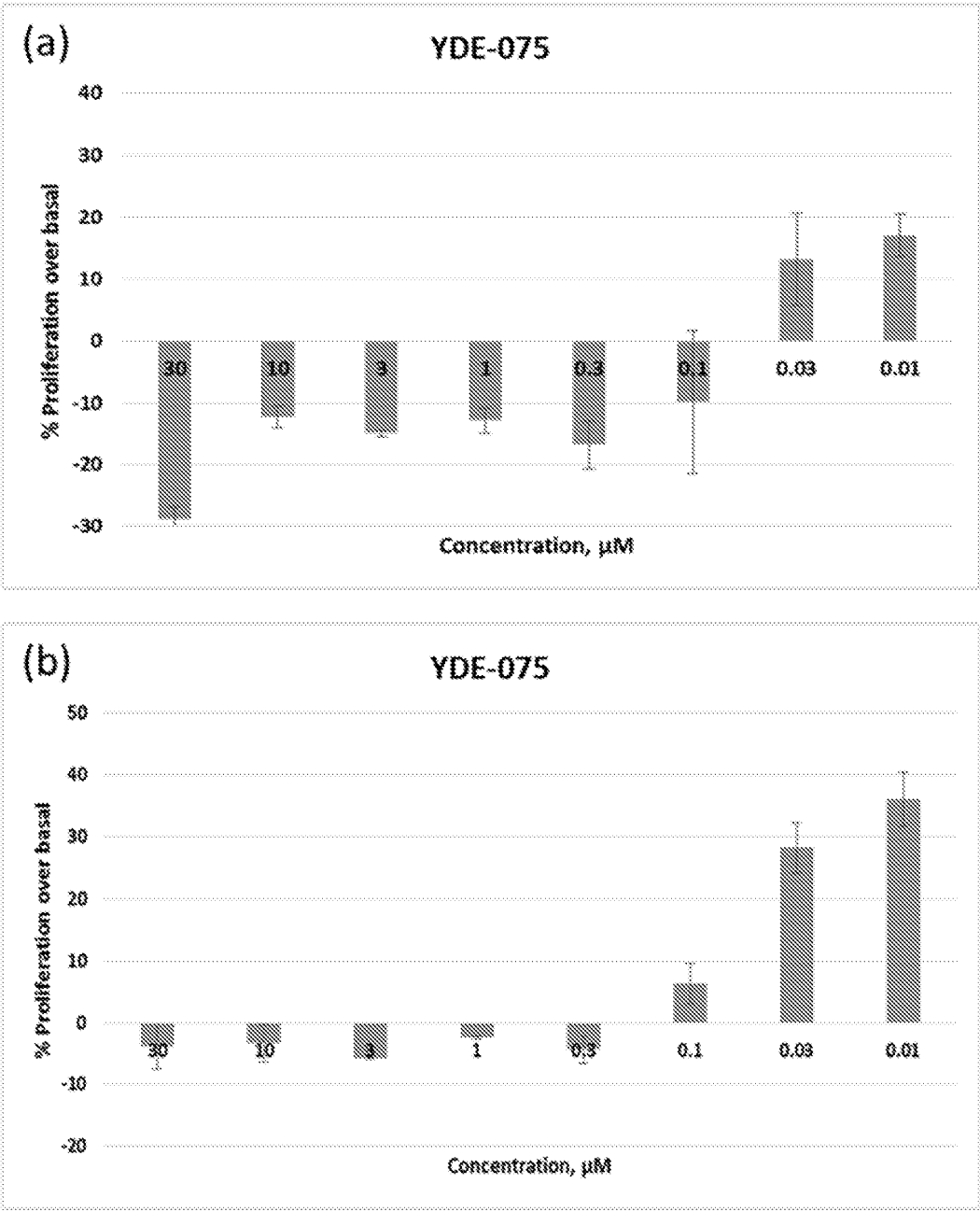


Fig. 43

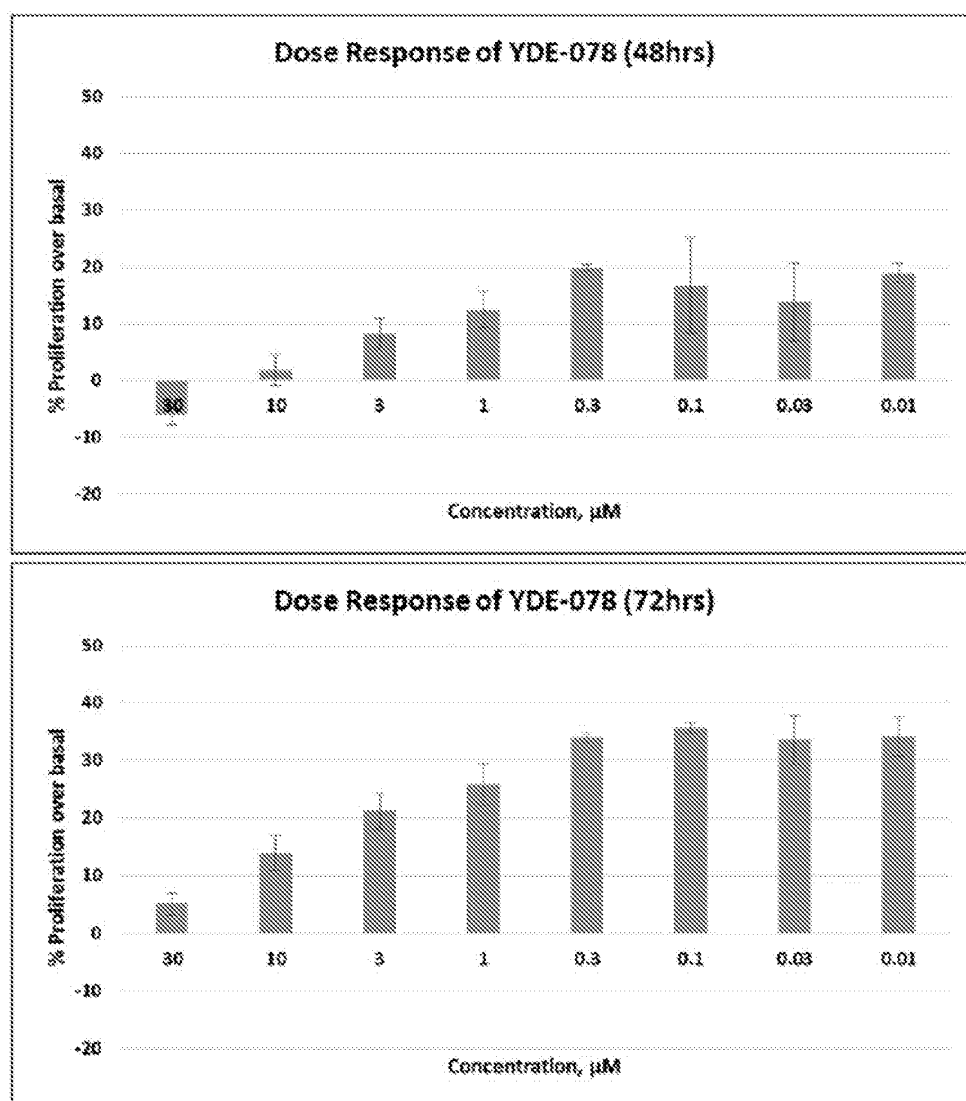


Fig. 44

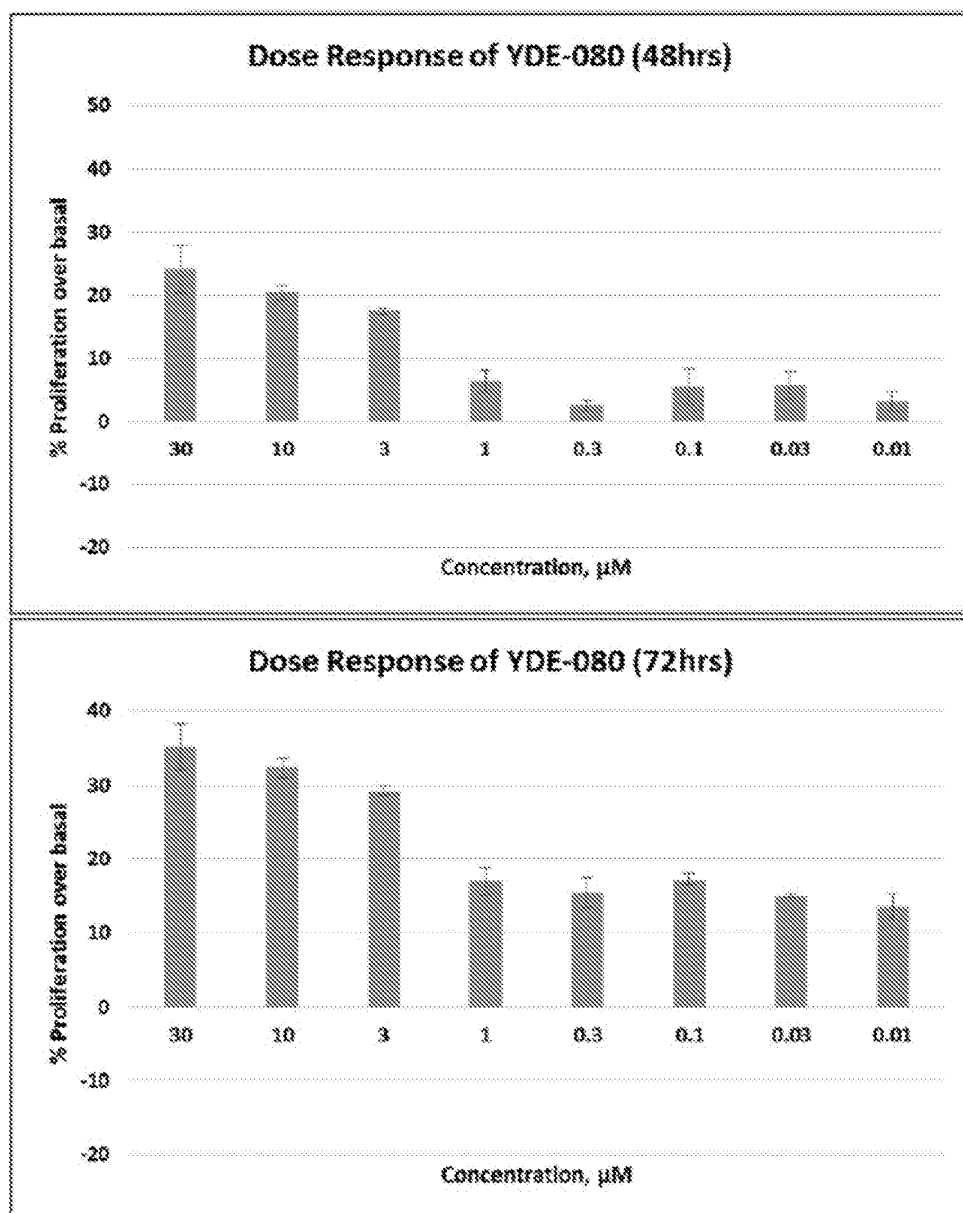


Fig. 45

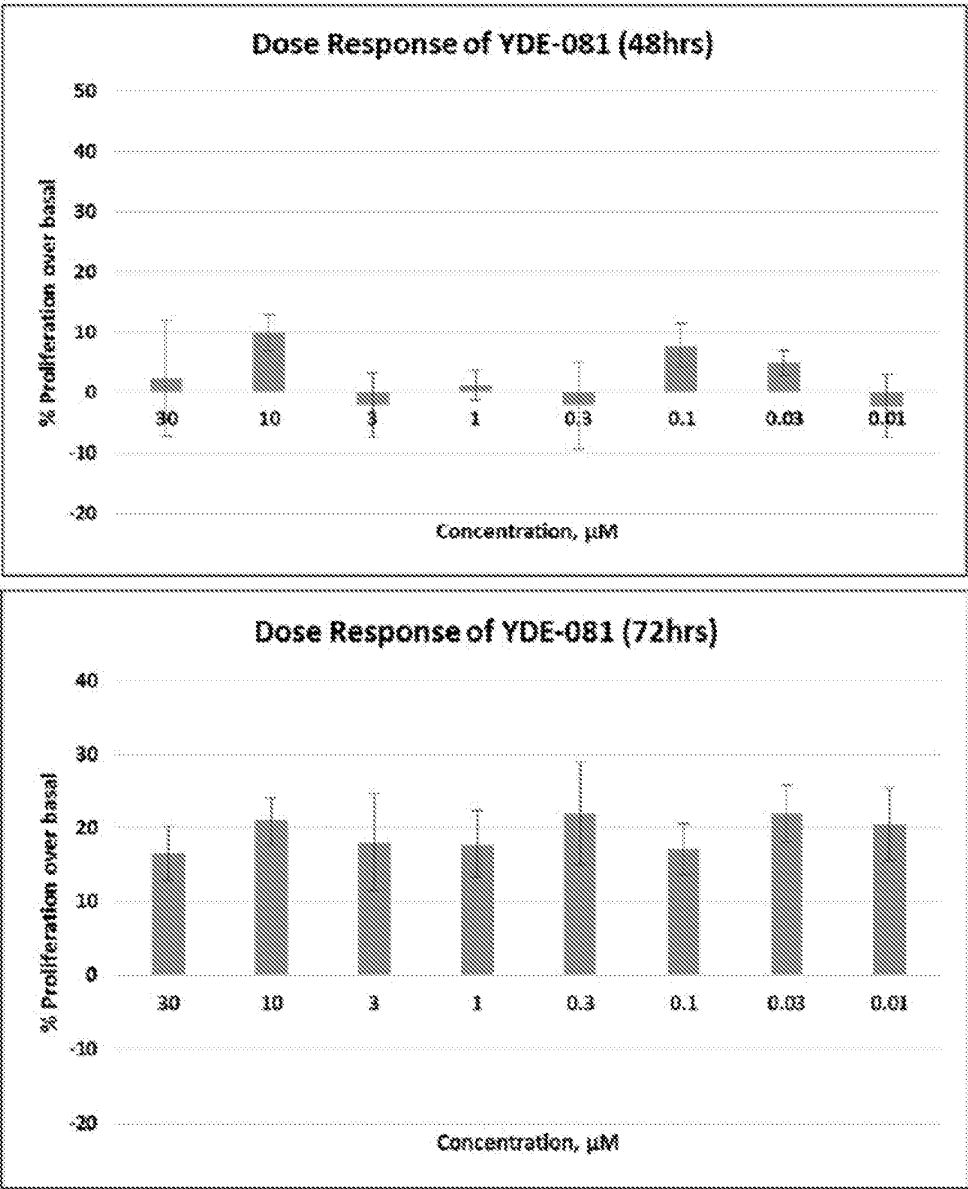


Fig. 46

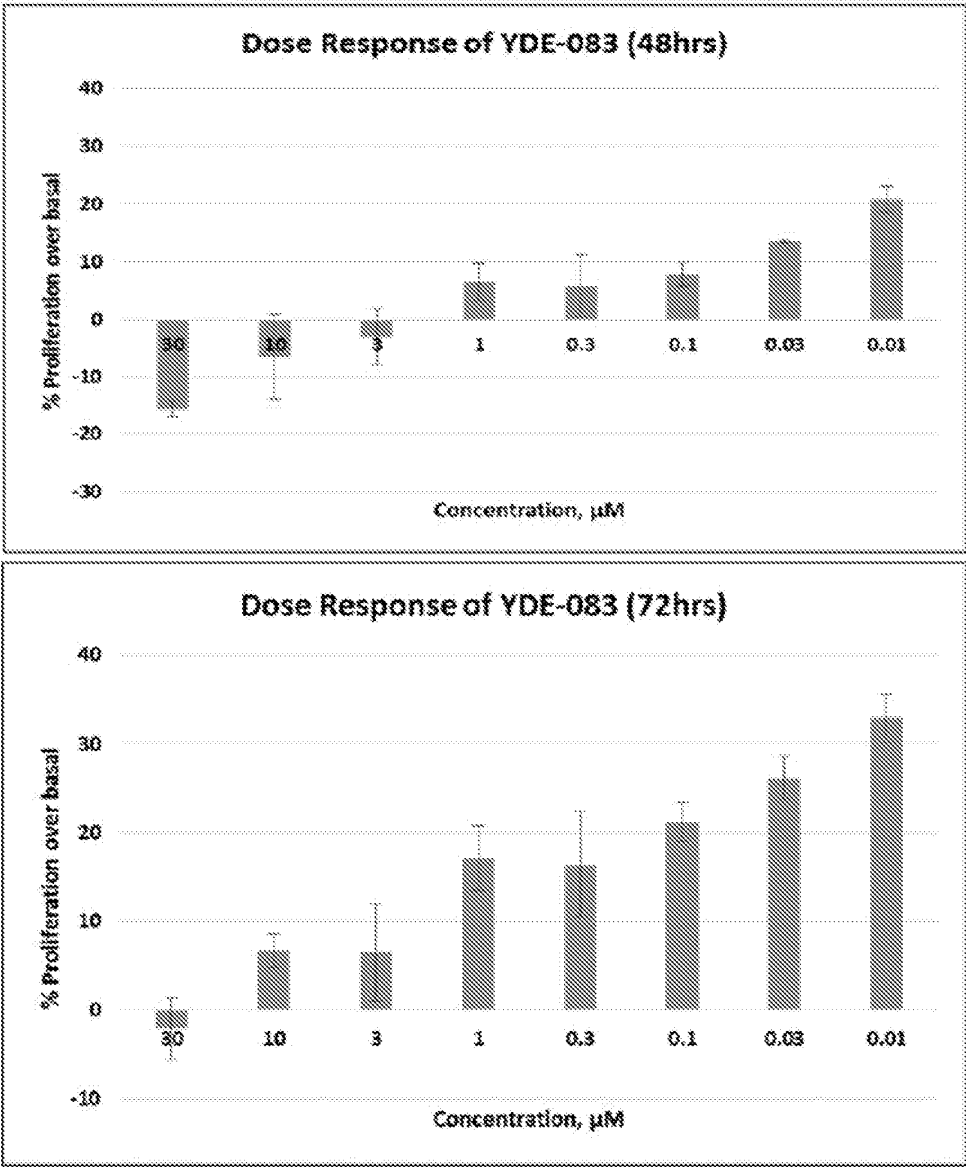


Fig. 47

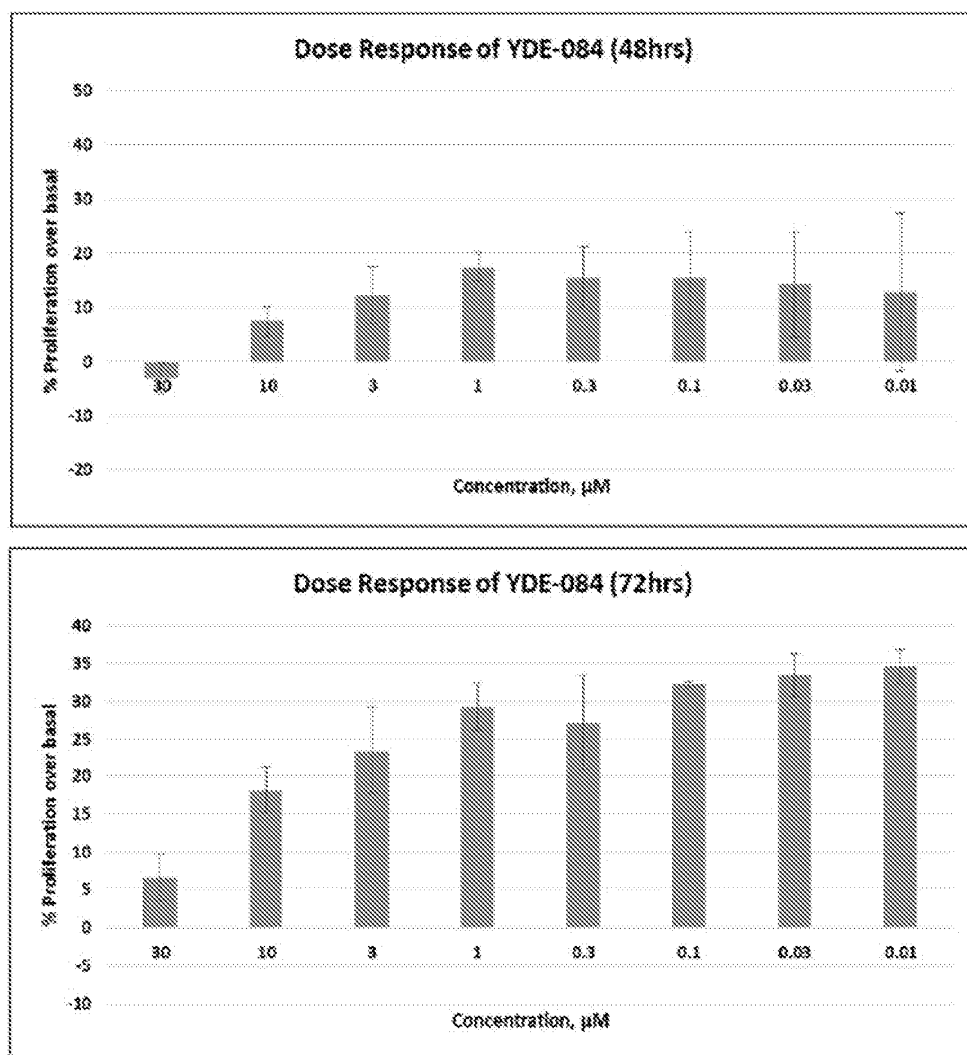


Fig. 48

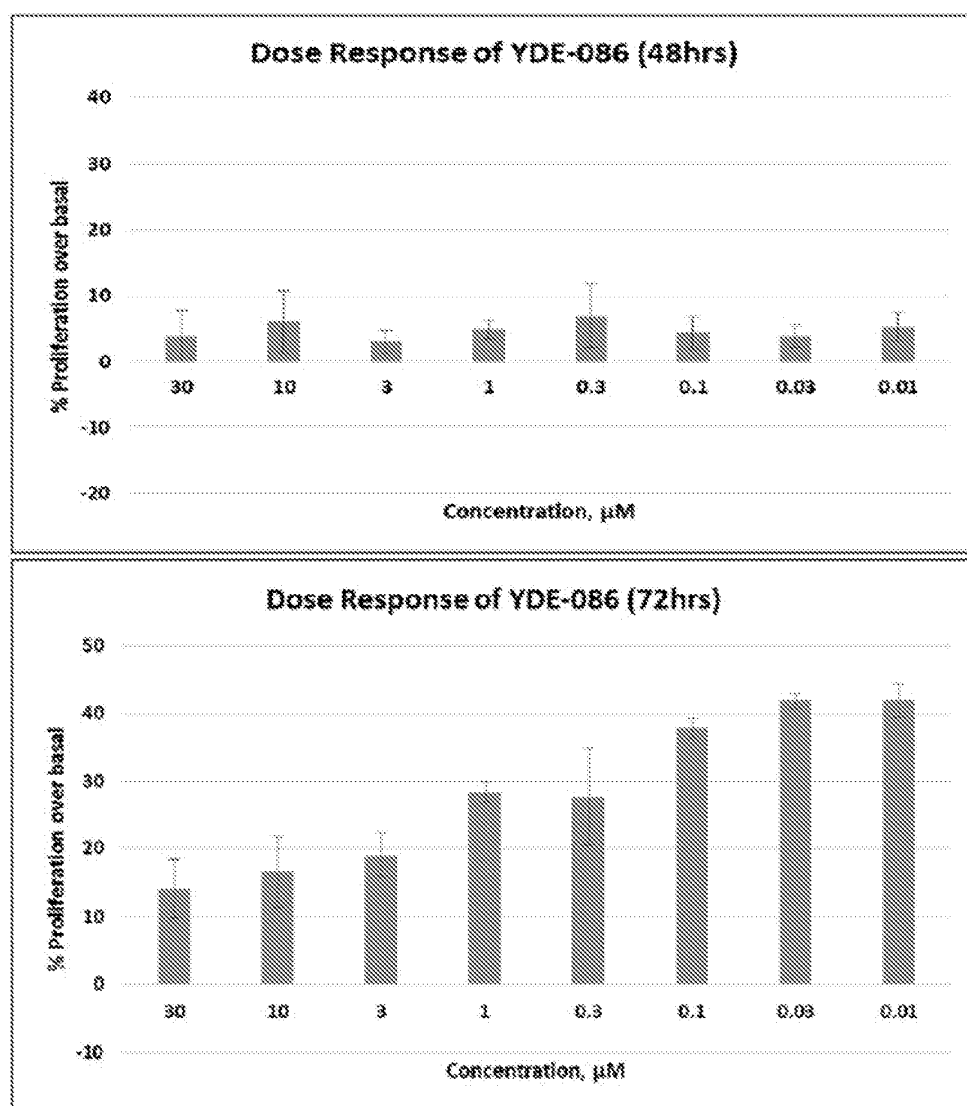


Fig. 49

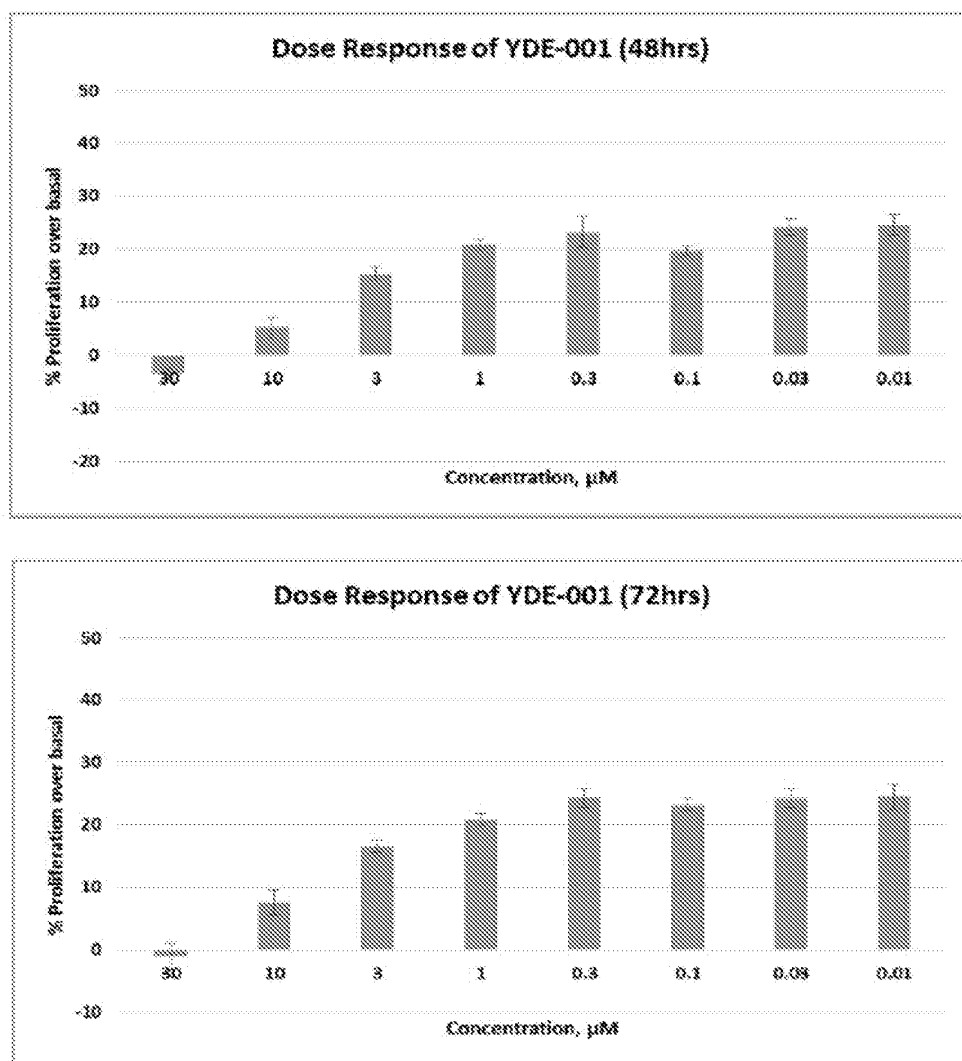


Fig. 50

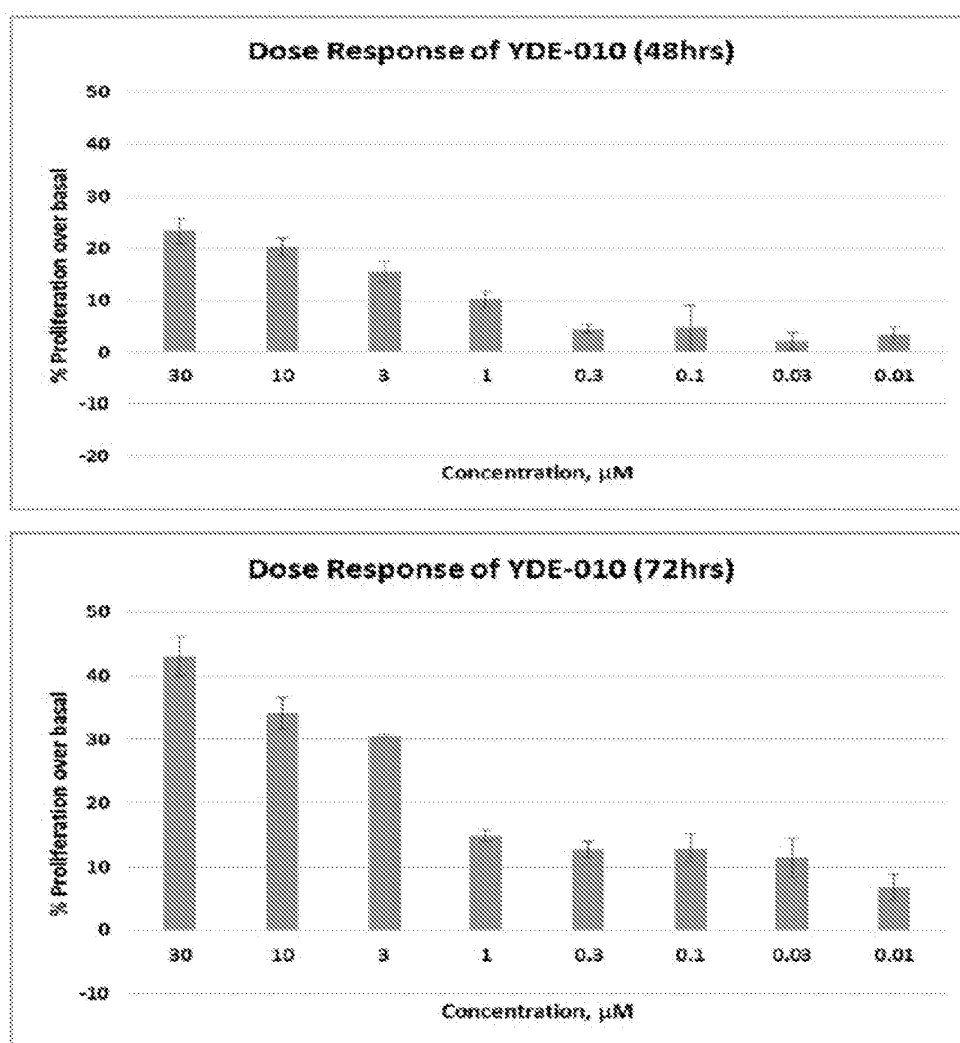


Fig. 51

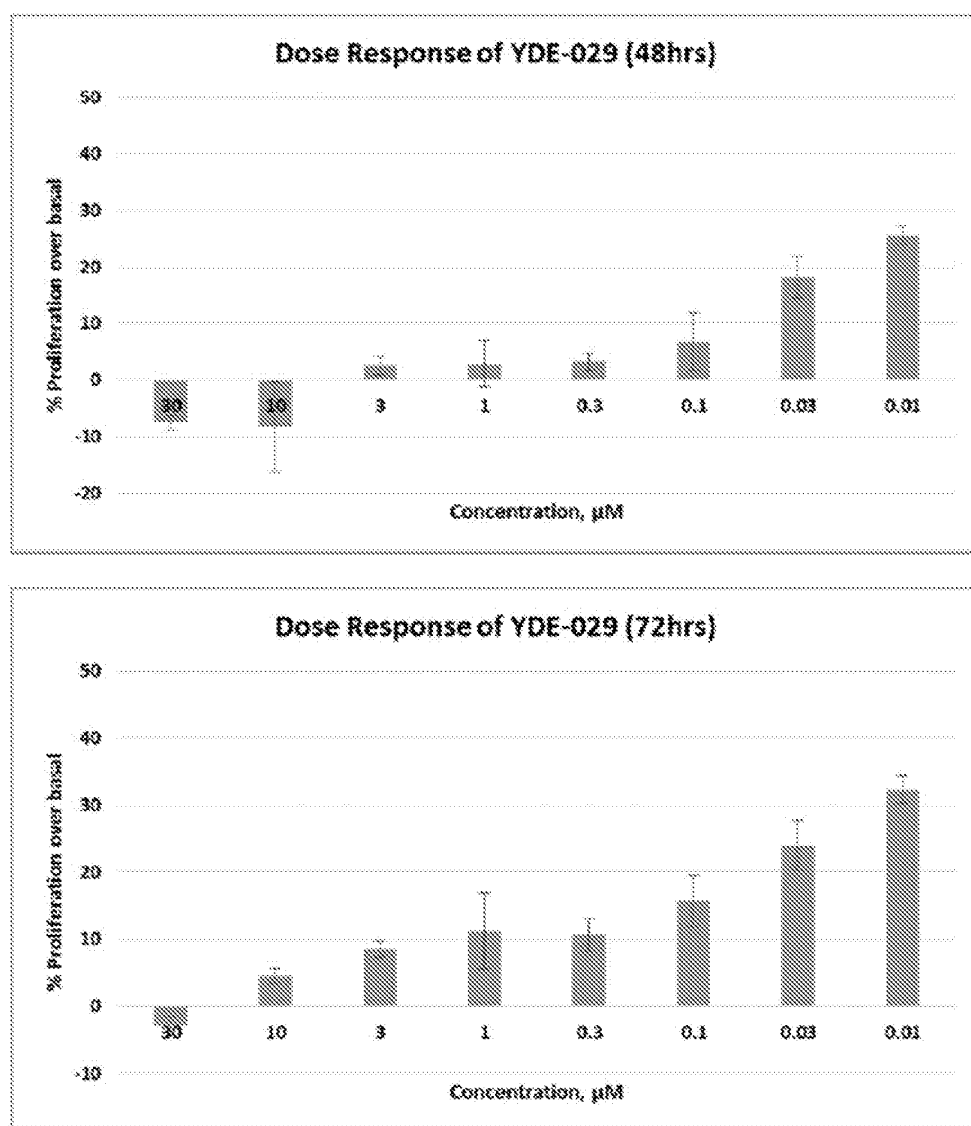


Fig. 52

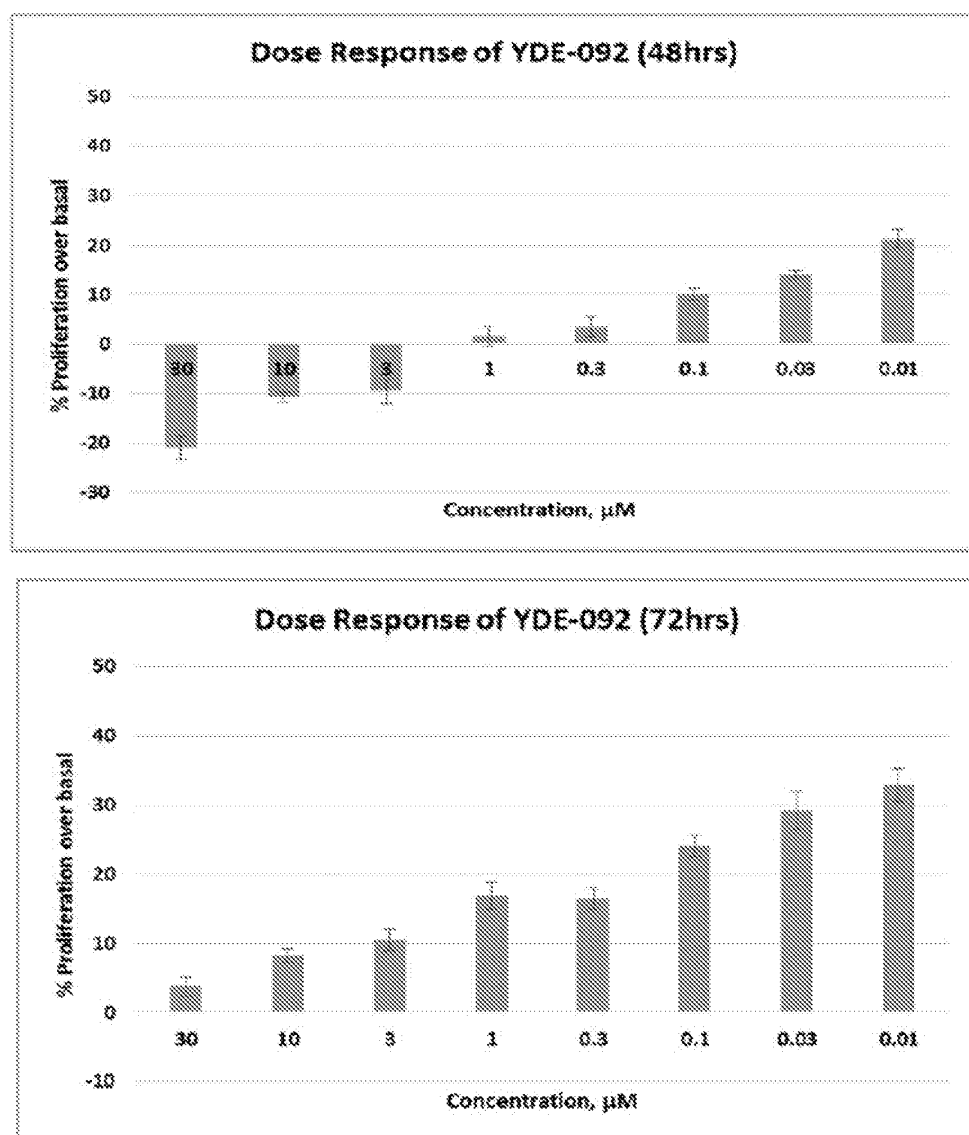


Fig. 53

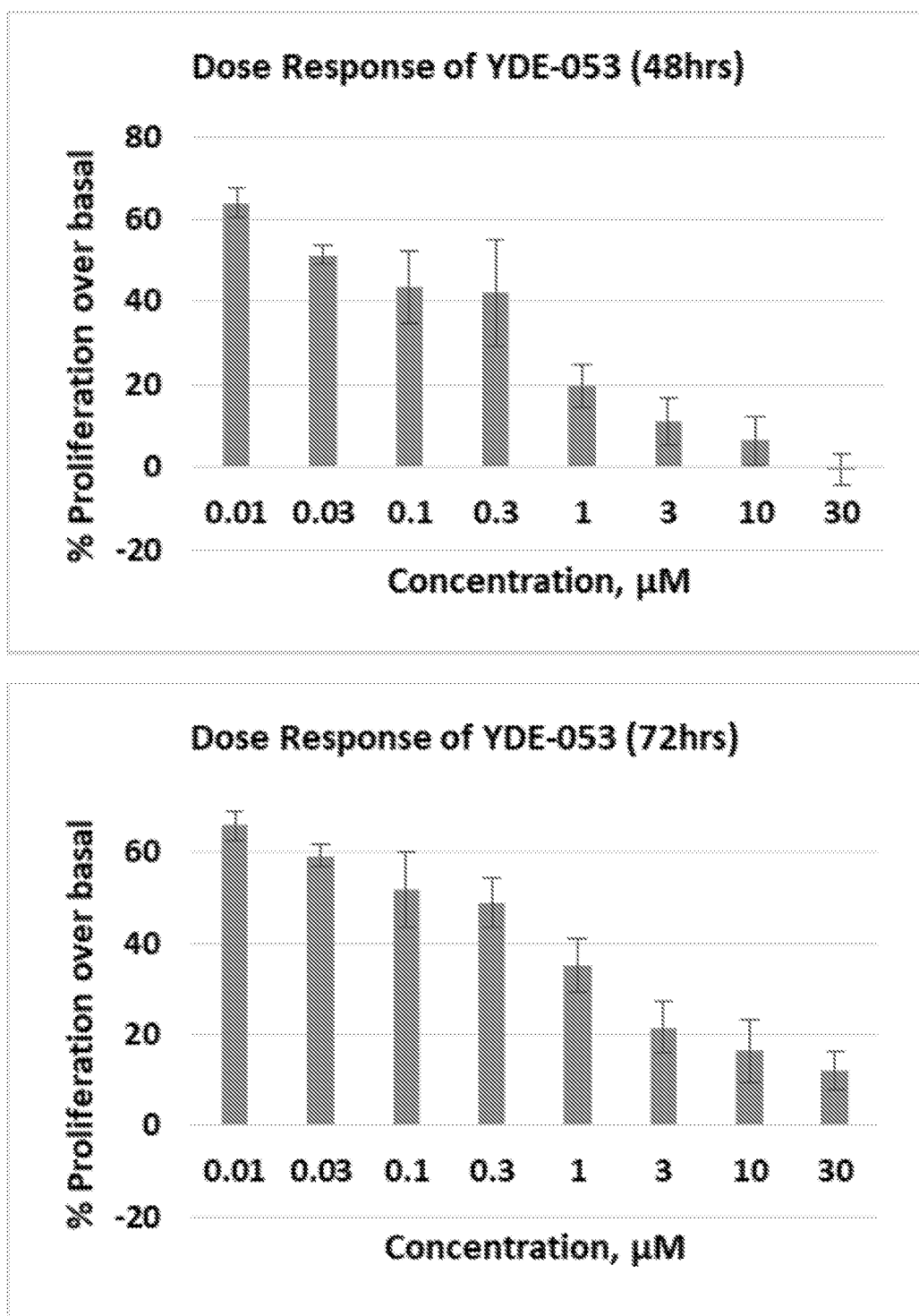


Fig. 54

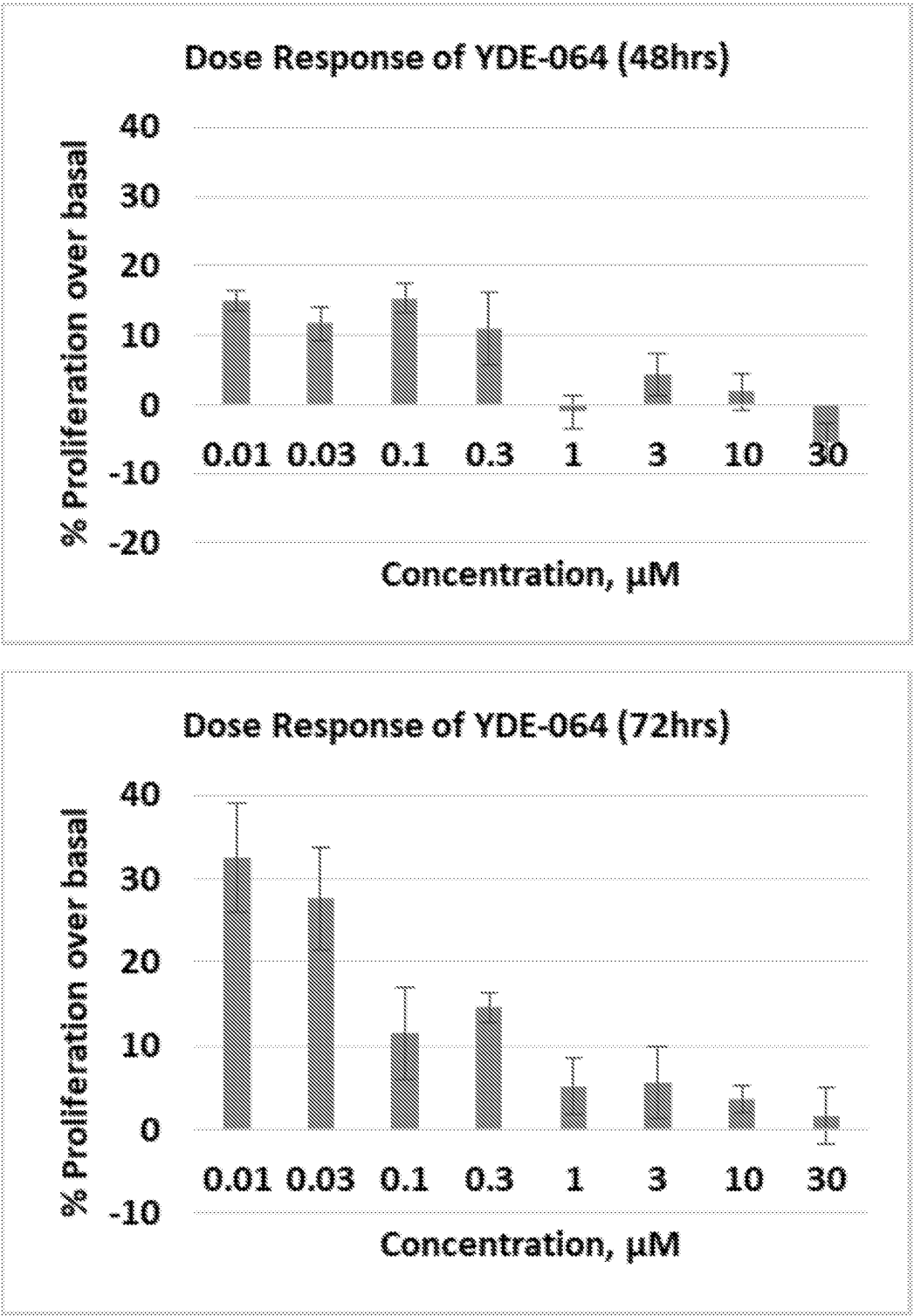


Fig. 55

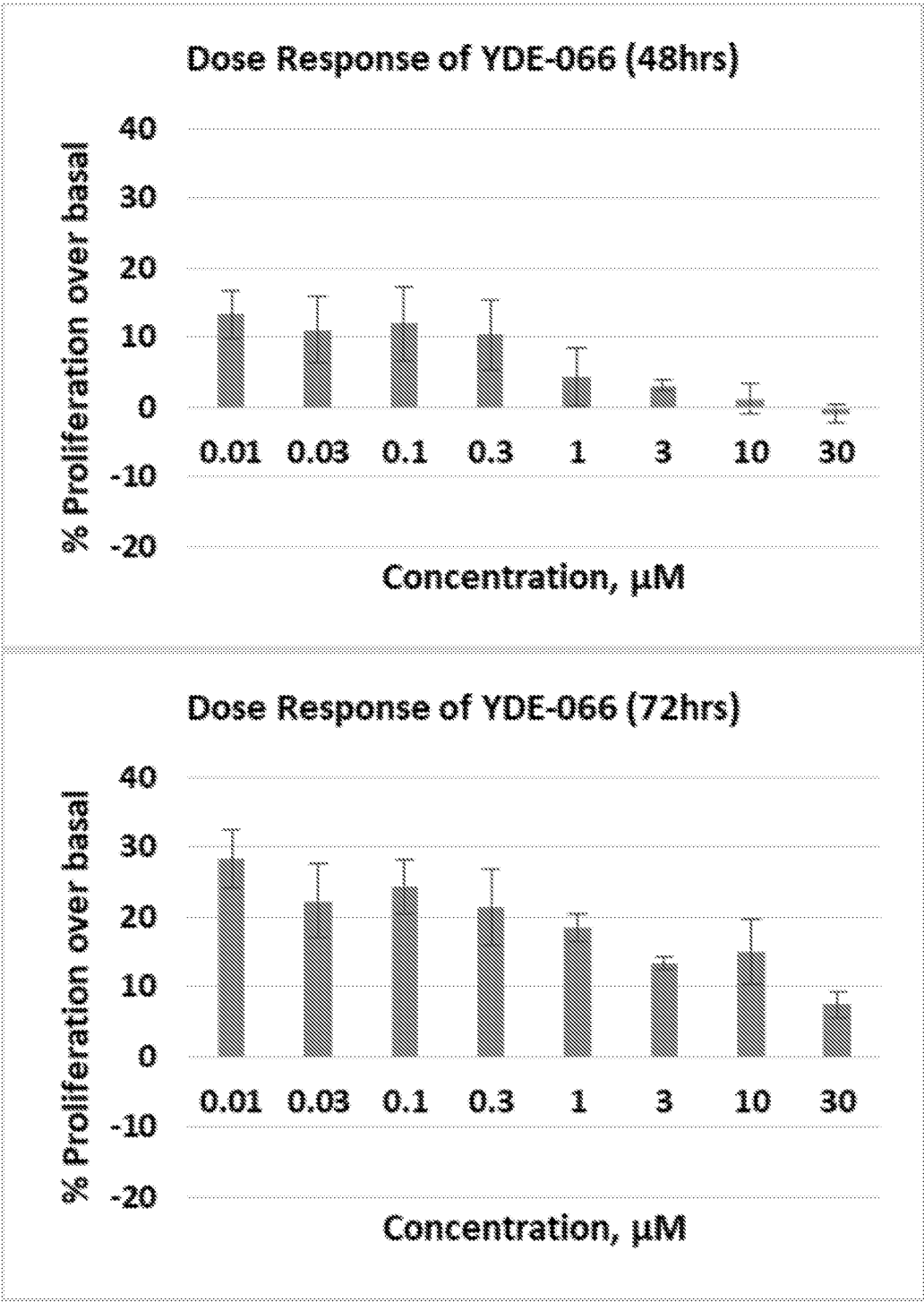


Fig. 56

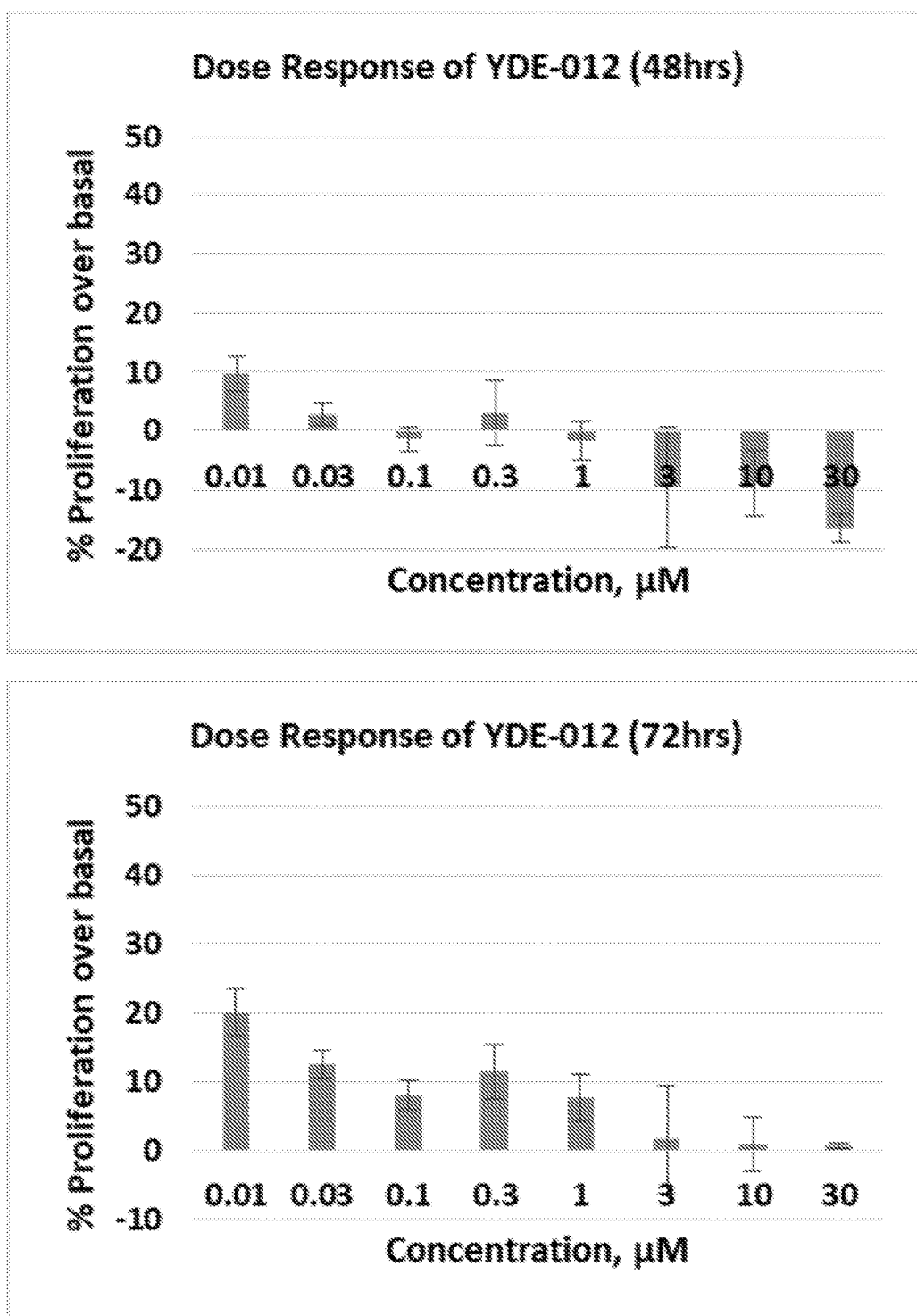


Fig. 57

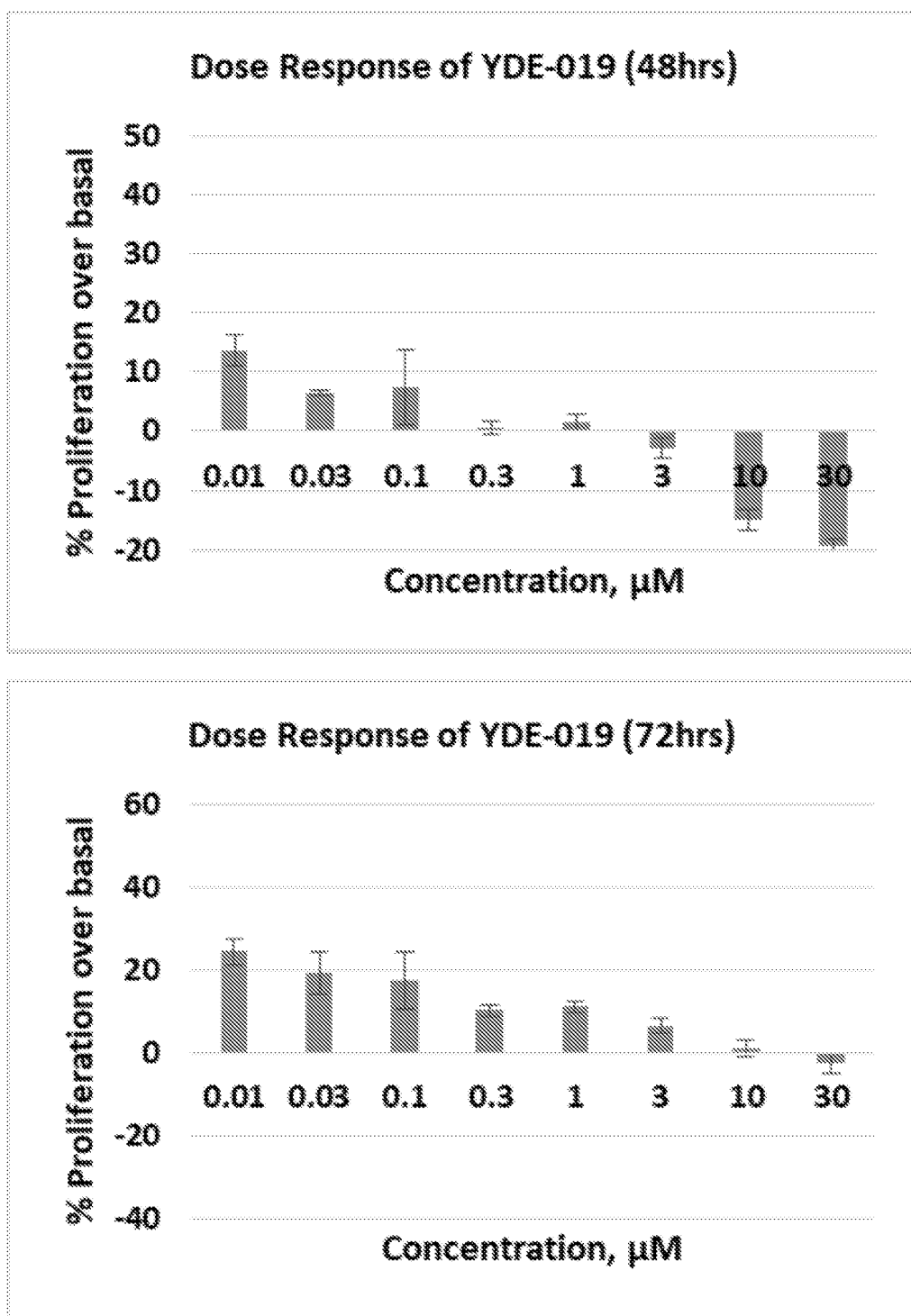


Fig. 58

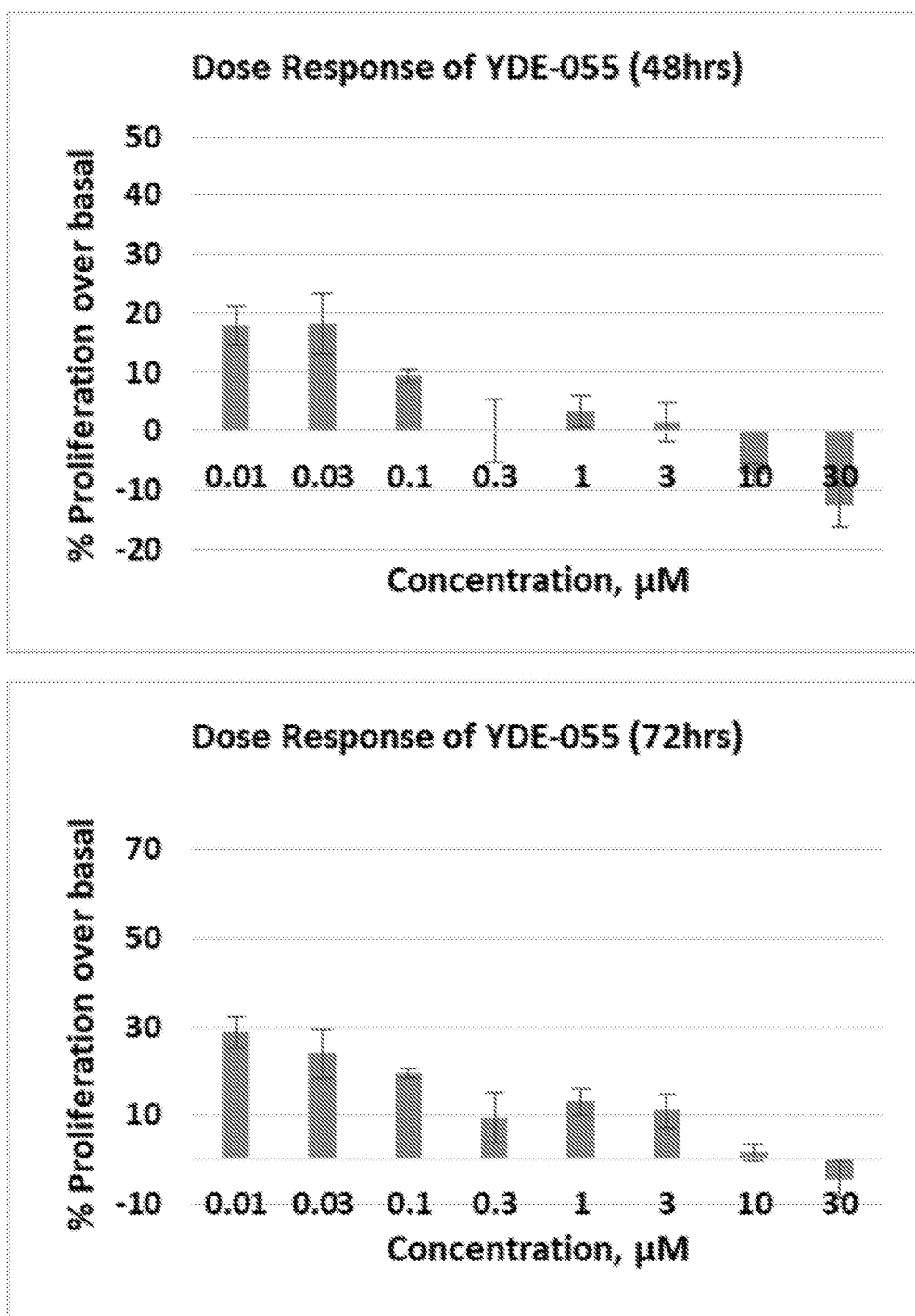


Fig. 59

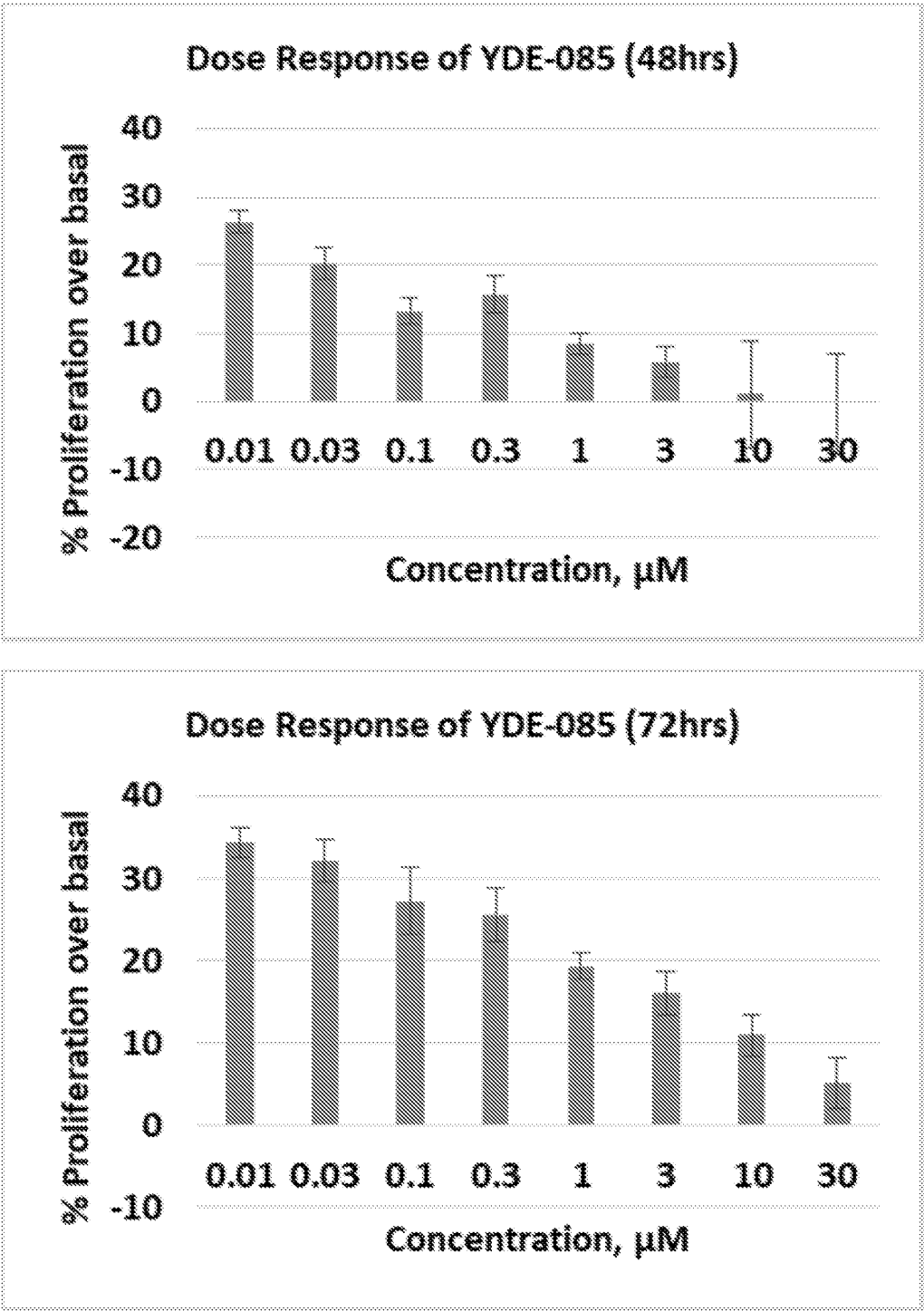


Fig. 60

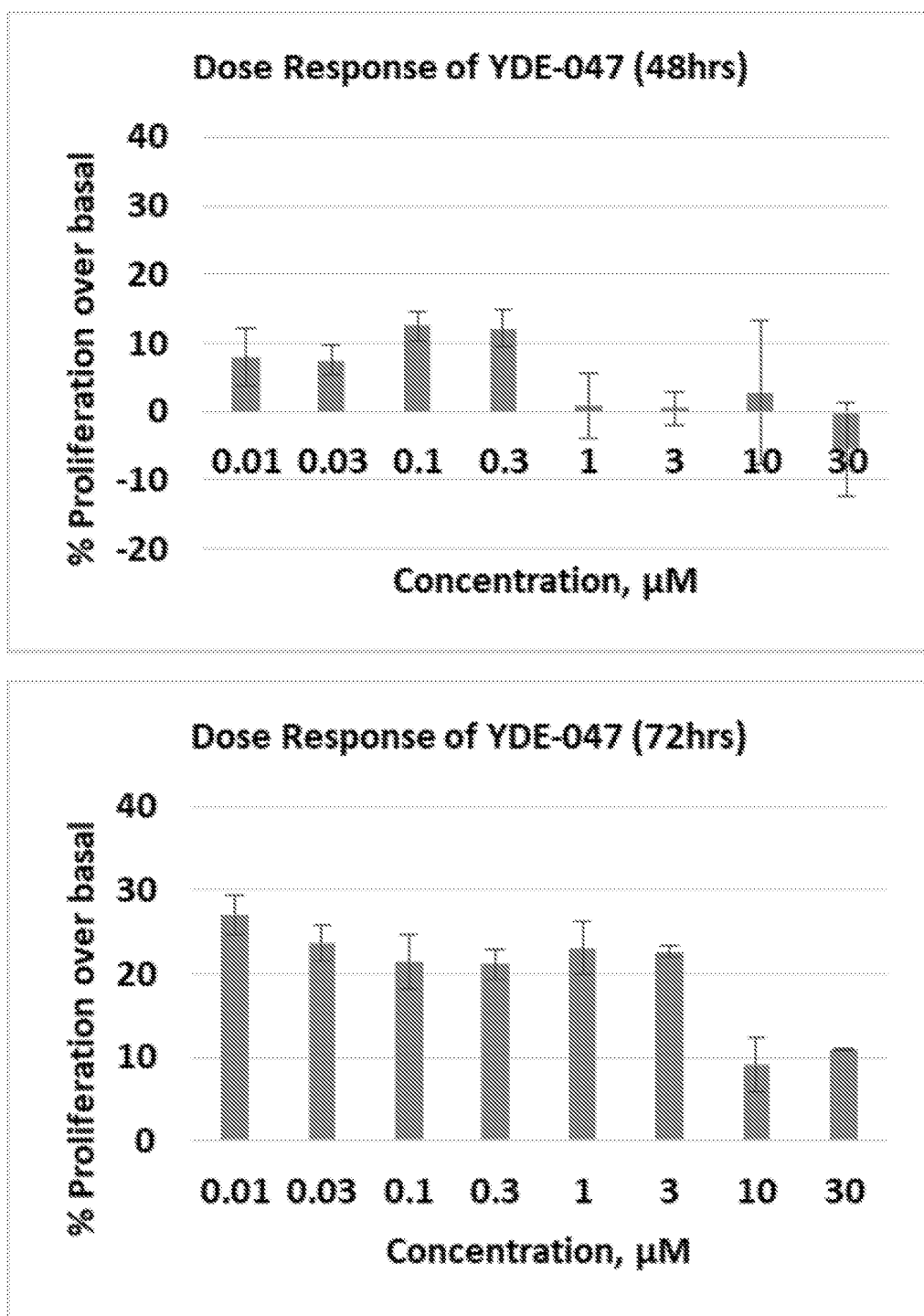


Fig. 61

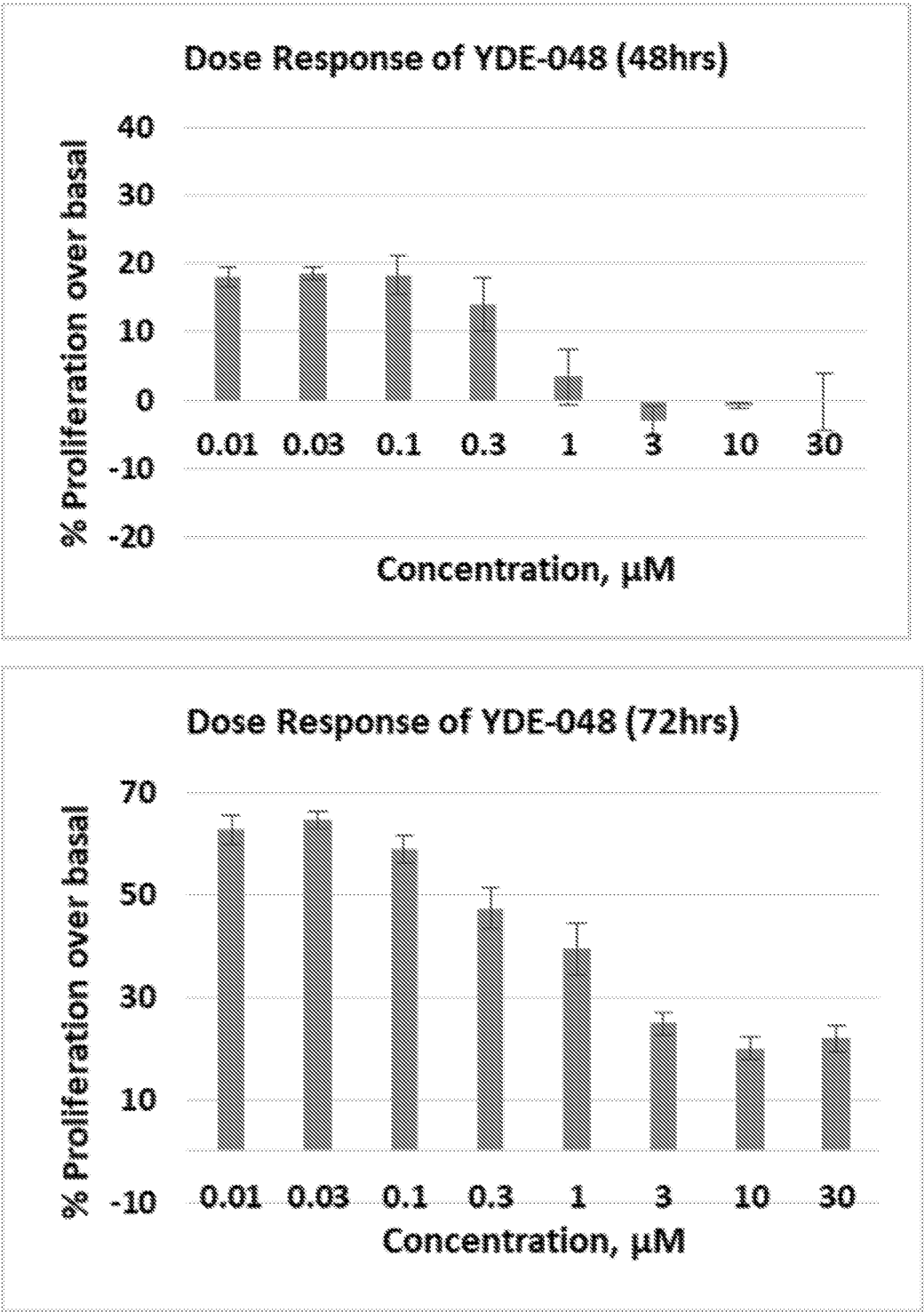


Fig. 62

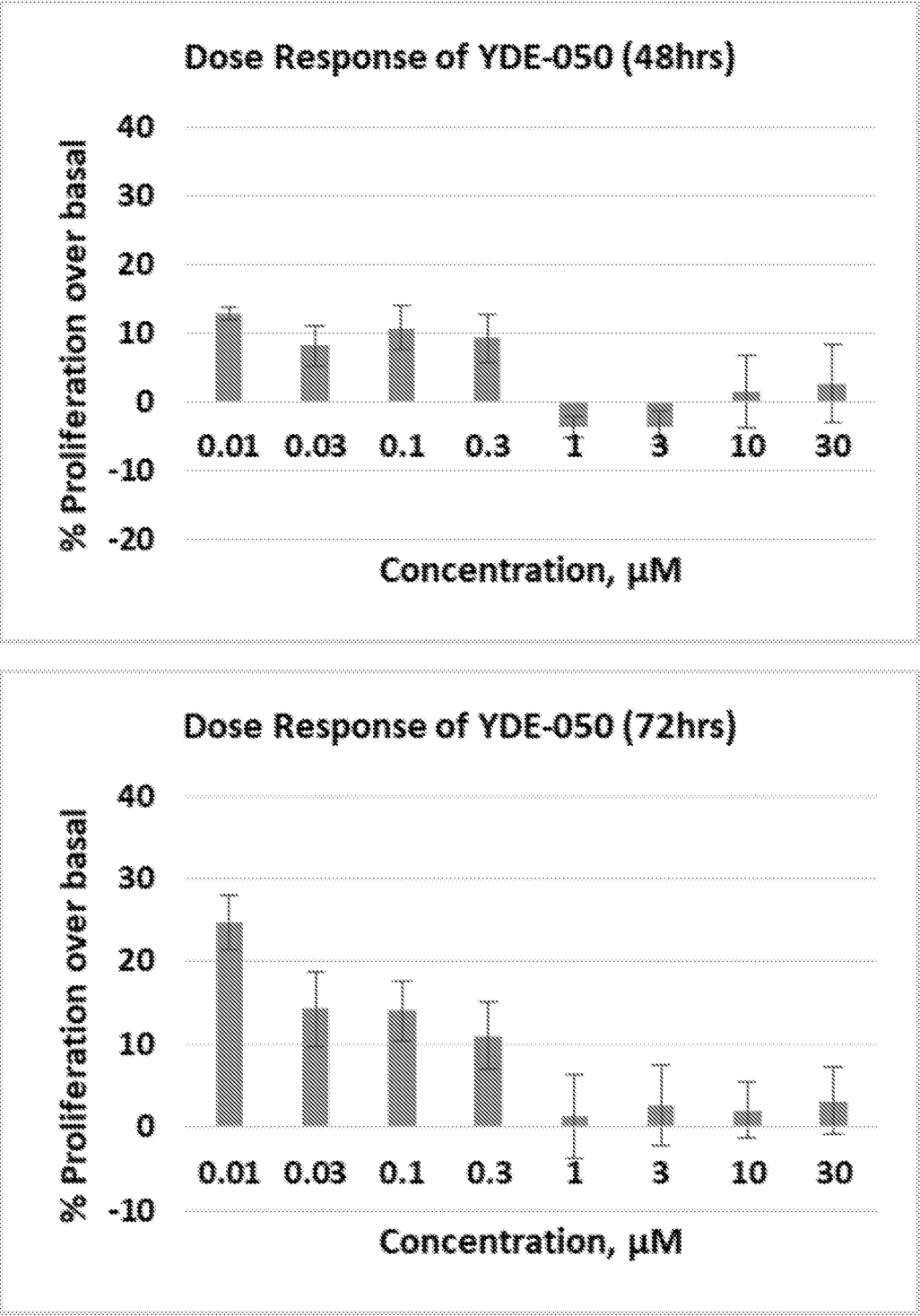


Fig. 63

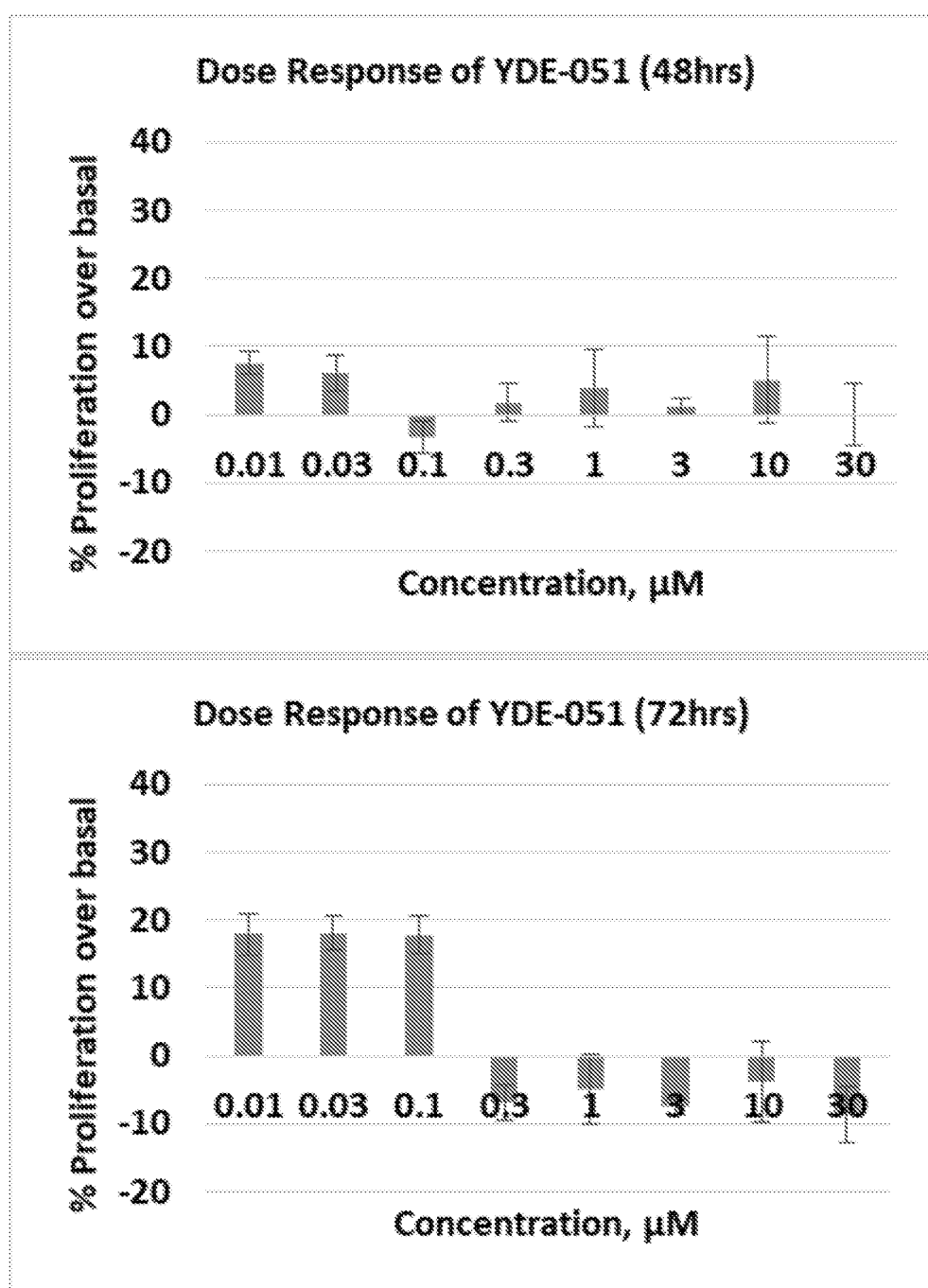


Fig. 64

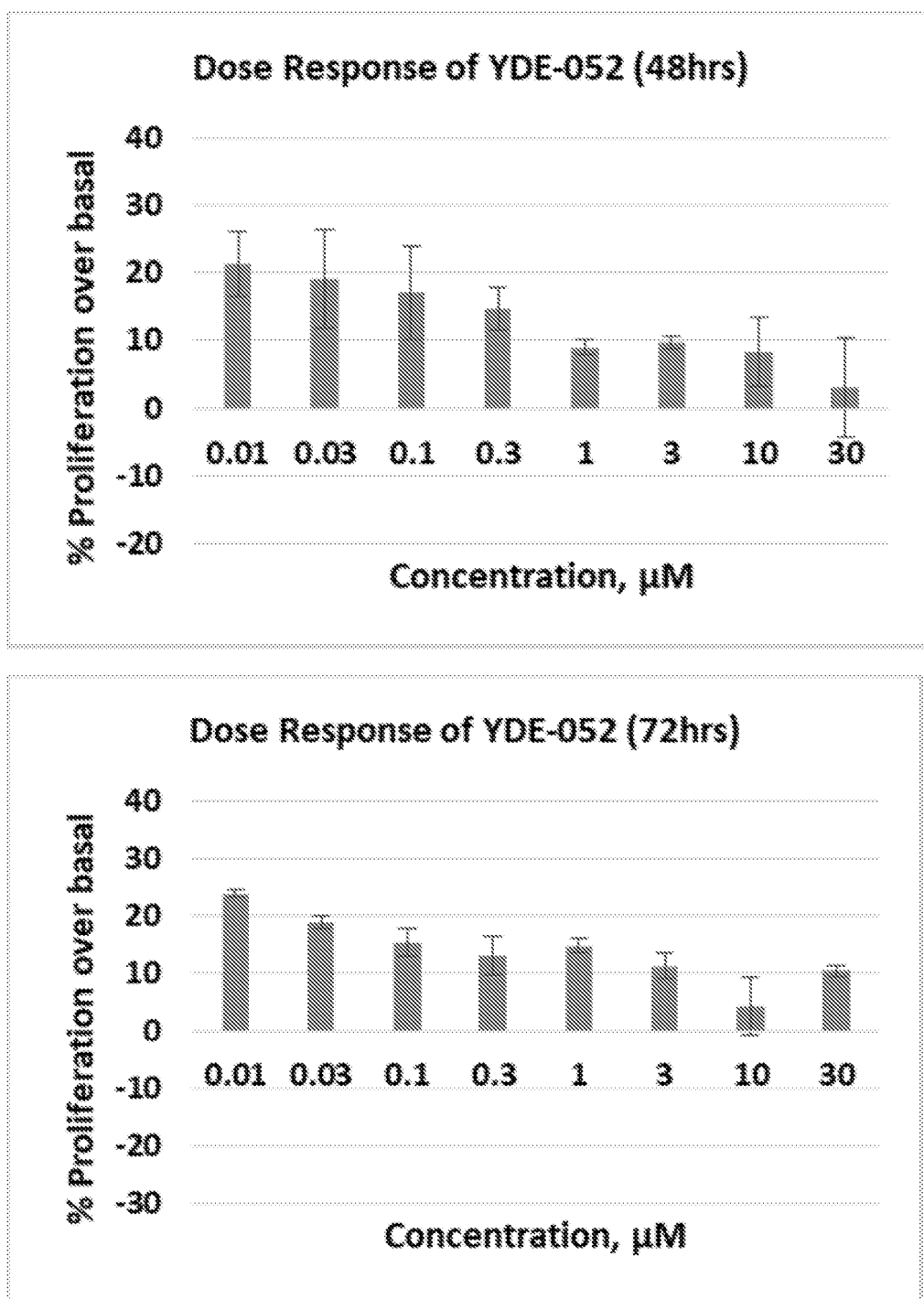


Fig. 65

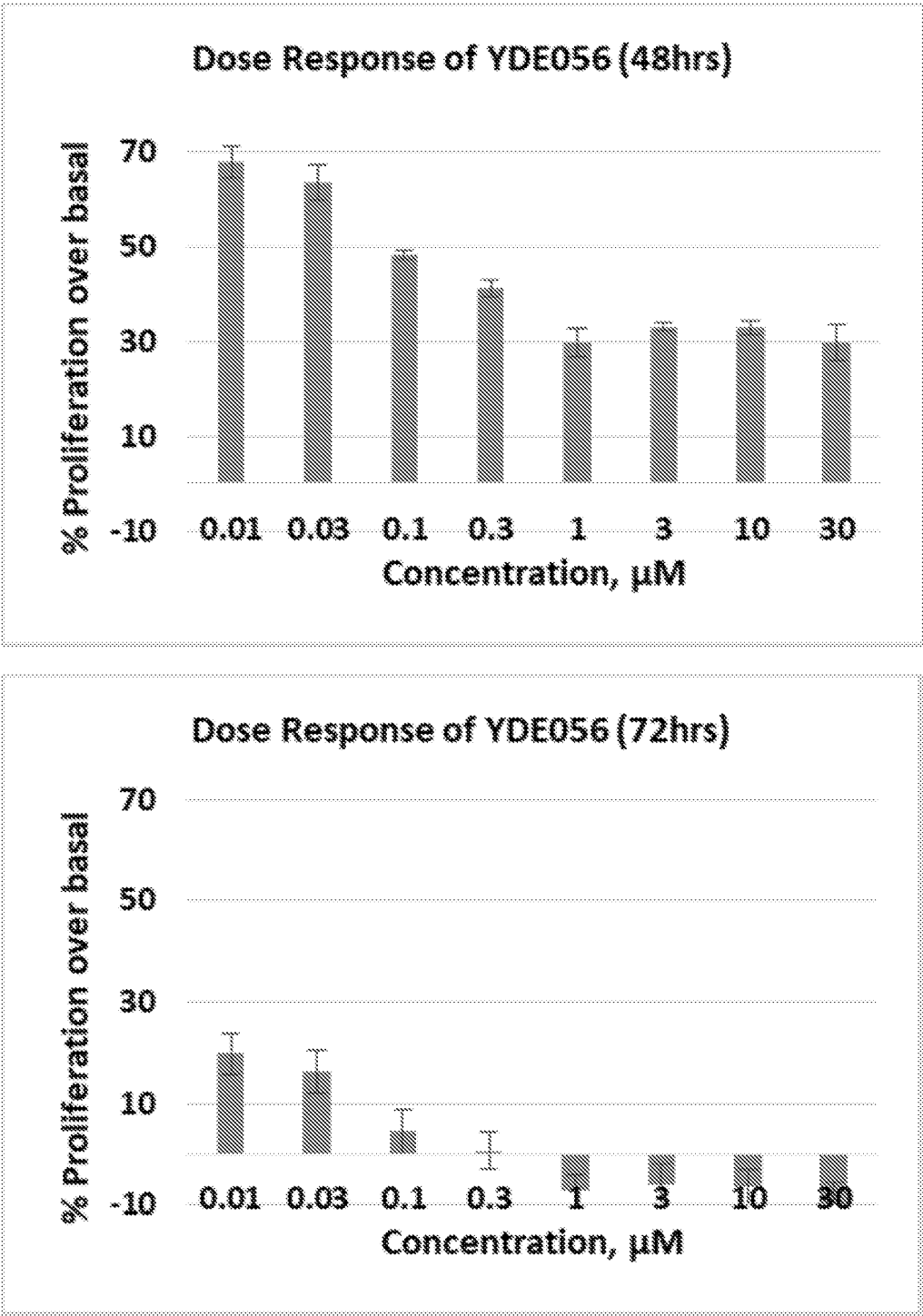


Fig. 66

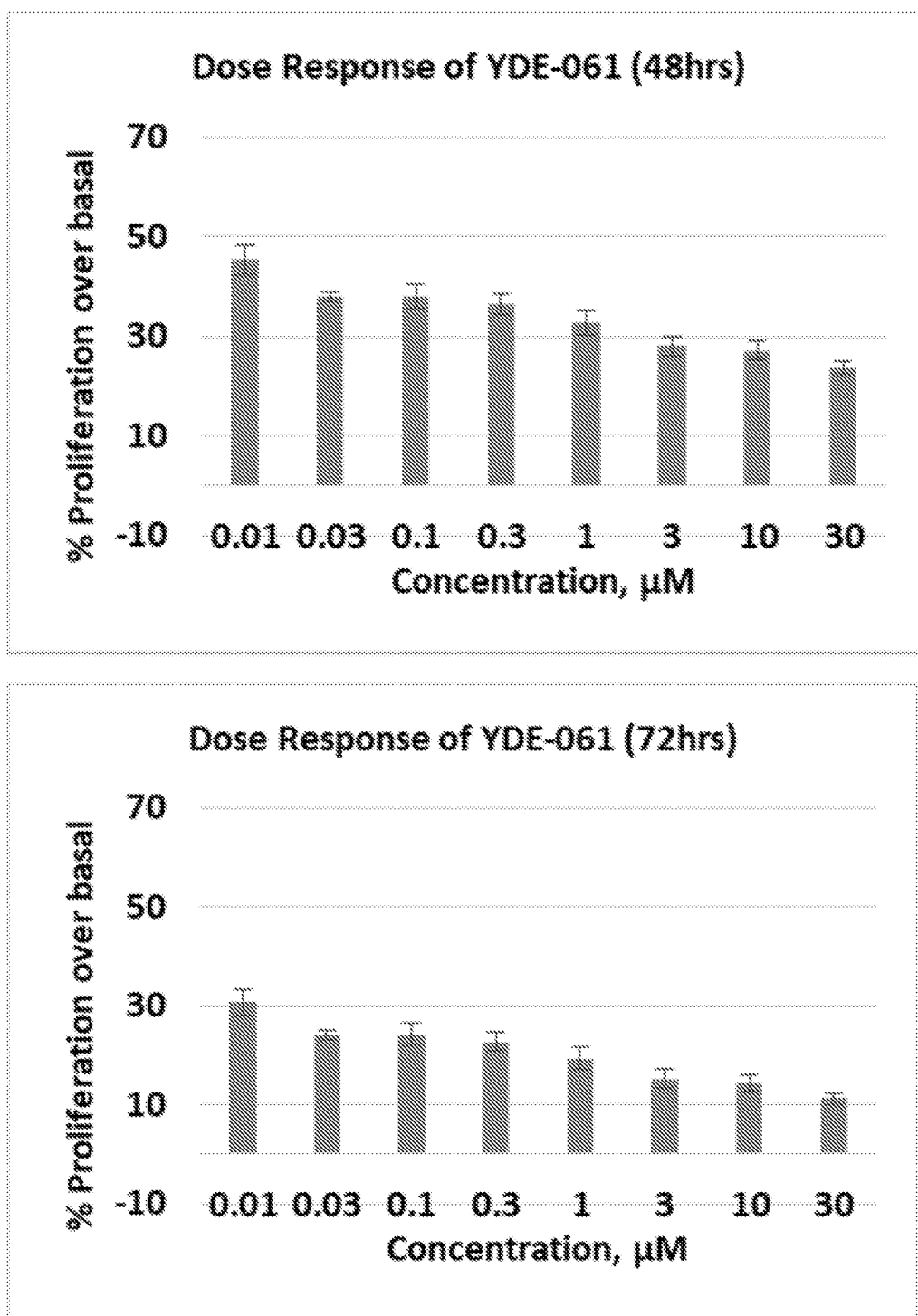


Fig. 67

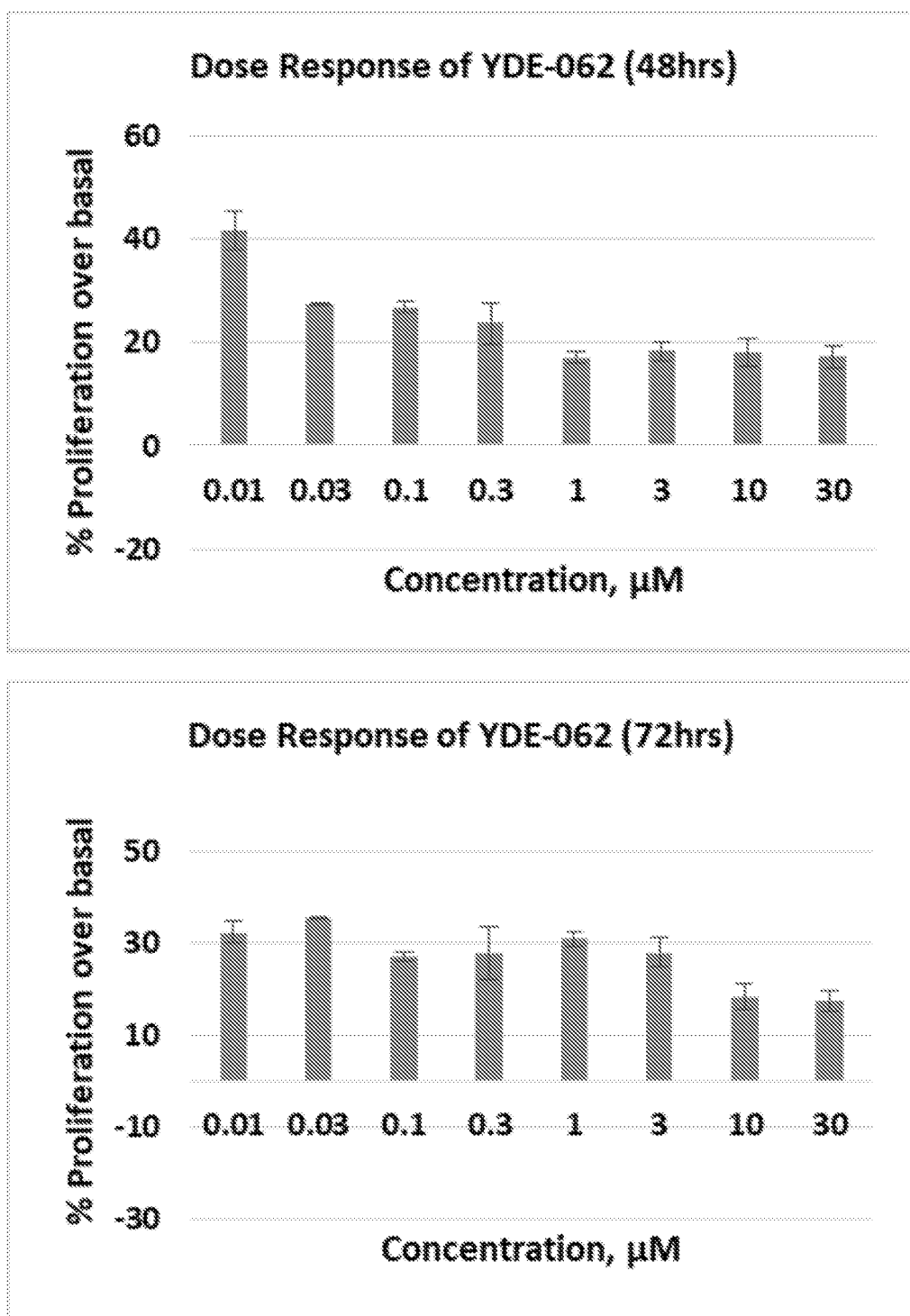


Fig. 68