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Fig. 1

Fig. 1A

C51 Gene Sequence (Heavy Chain) (SEQ ID NO.: 7)

CAGGTGAAACTGCAGGAGTCAGGACCTGACCAGGTGAAACCCTCTCAGTCACTTT
 CACTCACCTGCACTGTCAGTGTCTACTCCATCACCAGTGGTTATAGCTGGCACT
 GGATCCGGCAGTTTCCAGGAAACAACTGGAATGGATGGGCTACATACACTACA
GTGGTAGTACTAAGTACAACCCATCTCTCAAAAGTCGATTCTCTATCACTCGA
 GACACATCCAAGAACCAGTTCTTCCTGCAGTTGAATTCTGTGACTACTGAGGACA
 CAGCCACATATTACTGTGCAAGAGGGACCGACAATGCTGTGGACTACTGGGGC
 CAAGGGACCACGGTCACCGTCTCCTCA

C51 Gene Sequence (Light Chain) (SEQ ID NO.: 8)

GACATTGAGCTCACCCAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGG
 TTAATATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTAGCAATCAAAAG
AACTACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAATTGCTGATT
 TACTGGGCATCCAGTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGG
 ATCTGGGACAGATTTCACTCTCACCATCAGCAGTGTGAAGGCTGAAGACCTGGCA
 GTTTATTACTGTCAGCAATATTATATCTATCCTCTCACGTTTCGGTGCTGGGACC
 AAGCTGGAGCTGAAACGG

Fig. 1B

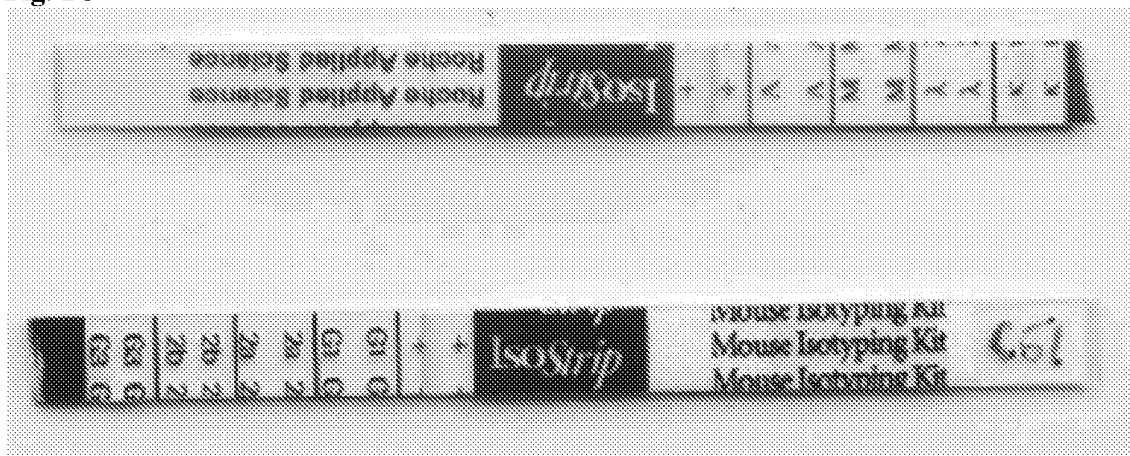
C51 Amino Acid Sequence (Heavy Chain) (SEQ ID NO.: 5)

QVKLQESGPDQVKPSQSLSLTCTVTVYSITSGYSWHWIRQFPGNKLEWMGYYIHYSG
STKYNPSLKSRFSITRDTSKNQFFLQLNSVTTEDTATYYCARGTDNAVDYWG
 QGTTVTVSS

C51 Amino Acid Sequence (Light Chain) (SEQ ID NO.: 6)

DIELTQSPSSLA VSVGEKVNMSCKSSQSLLYSSNQKNYLAWYQQKPGQSPKLLIYW
ASSRESGVPDRFTGSGSGTDFLTISSVKAEDLAVYYCQQYYIYPLTFGAGTKLEL
 KR

Fig. 1C



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Fig. 2

A

Breast Cancer Cell Lines										
C51	BT474	BT20	CAMA1	HCC1937	HCC1954	HCC2218	HS578T	MCF7	MDAMB231	SKBR3
	3	3	4	3	4	3	2	3	3	3
Colorectal Cancer Cell lines										
C51	COLO205	HCC2998	HCT15	HCT116	HT29	KM12	LS174T	SW620		
	3	0	0	0	2	2	2	2		
Kidney Cancer Cell Lines										
C51	786O	A498	ACHN	CAK1	UO31	RXFP393	SN12C	TK10		
	3	3	3	3	3	3	0	3		
Liver Cancer Cell Lines				Normal Cell Lines						
C51	HEP3B	HEPG2	HUHT	PLC	C51	IMR90	IOSE523	HEK293	HFF	WTER106F3
	3	1	3	3		0	0	0	0	0
Ovarian Cancer Cell Lines										
C51	CAOV3	CH1	IGROV1	OV17R	OV98	OVCA432	OVCAR3	OVCAR8	OVCA433	PEA1
	3	0	3	0	2	3	3	3	2	3

Legend

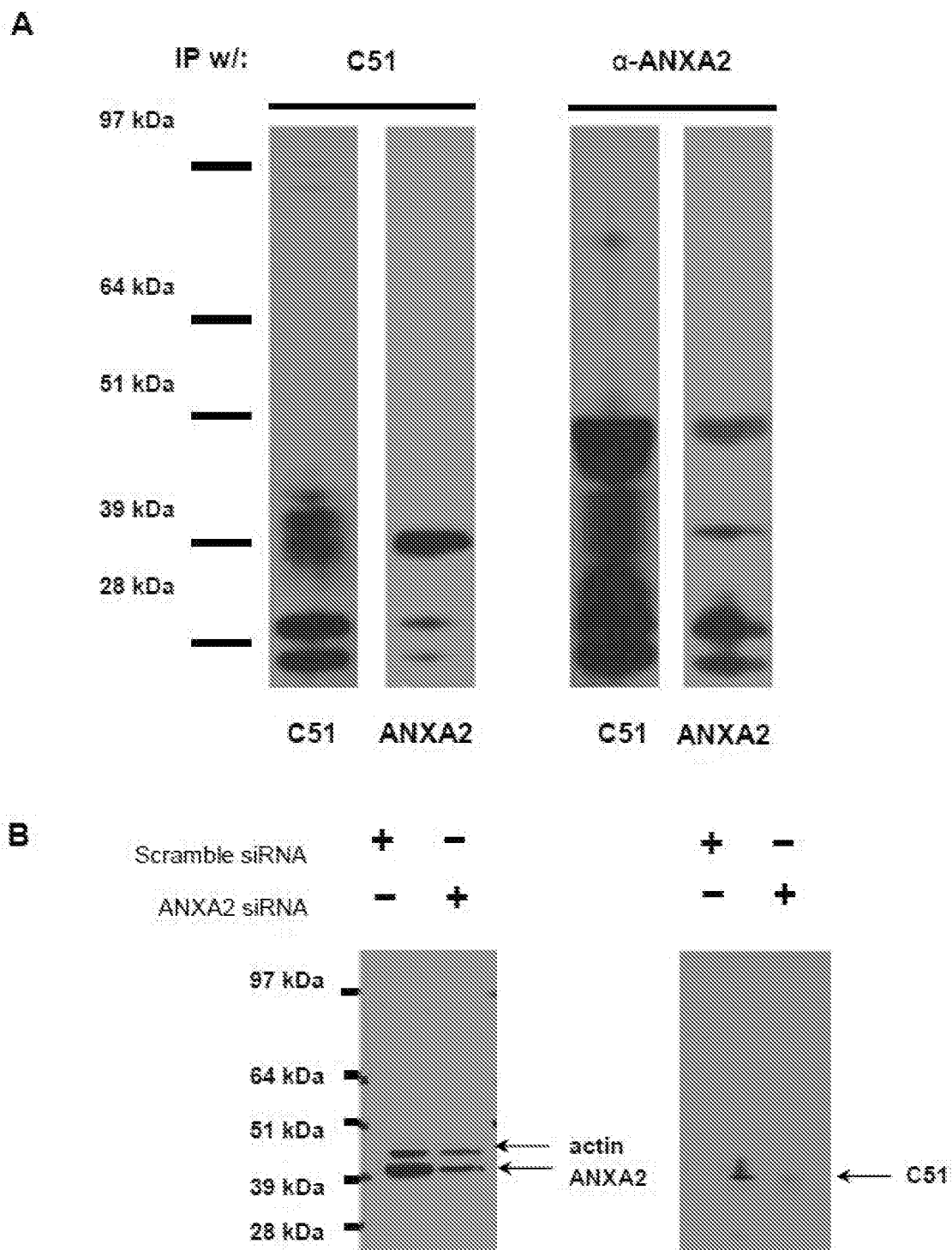
4	>80% binding
3	60%-80% binding
2	40%-60% binding
1	10%-40% binding
0	<10% binding

B

Ovarian			Breast		
EMT Category†	Cell line	mAb clone	EMT Category†	Cell line	mAb clone
E	CaOV3	+++	E	BT474	++++
E	OVCAR3	++++	E	CAMA1	++++
E	OVCAR8	++++	E	HCC2218	++++
E	OV98	++	E	MDA453	++++
E	IGROV1	+++	E	MCF7	++++
IE	OV17R	-	E	SKBR3	++++
IE	OVCA432	+++	E	T47D	++++
IE	OVCA433	++	IE	BT20	++++
IM	CH1	-	IE	HCC1937	+++
IM	HEY	-	IM	HCC1954	++++
IM	HEYC2	-	M	MCF10A	++
IM	SKOV3	+++	M	MDA-MB-231	+
IM	SKOV3(D10)	+	M	BT549	-
M	A2780	-	M	HS578T	++++
M	COLO720E	-	U	184B5	++++
M	HEYA8	-	U	HCC1395	-
M	OVCAR10	-			
M	TOV112	-			
U	IOSE523	-			

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Fig. 3



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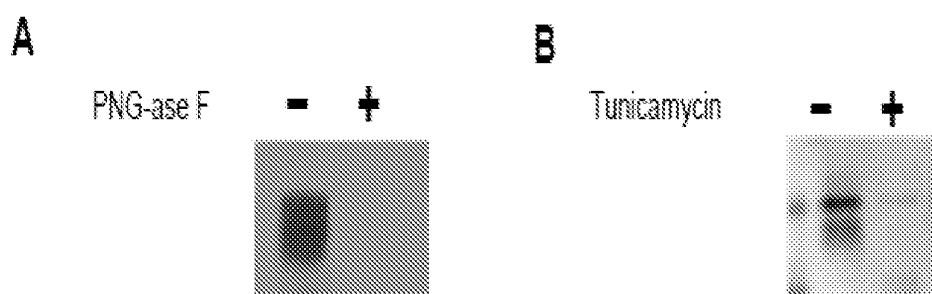
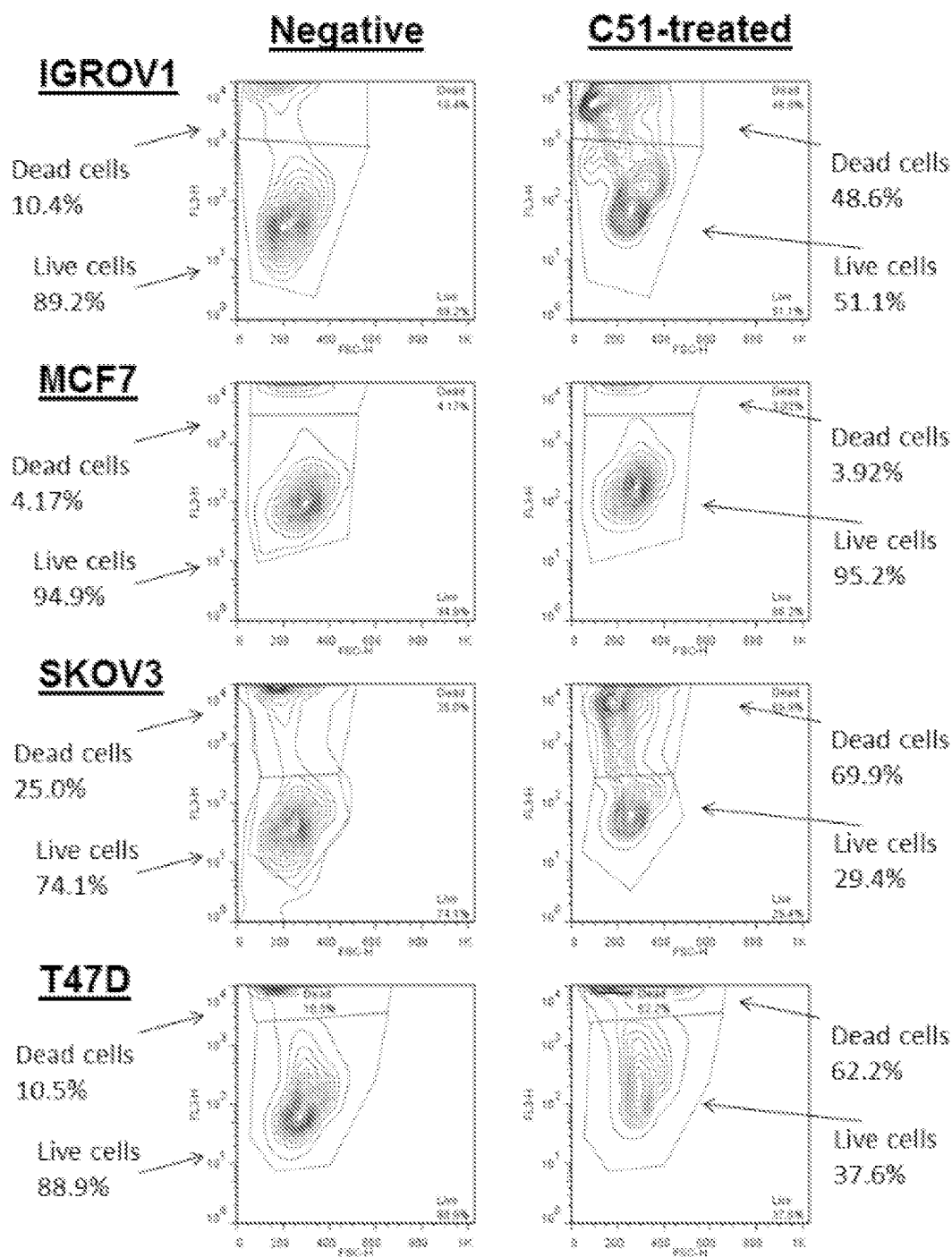
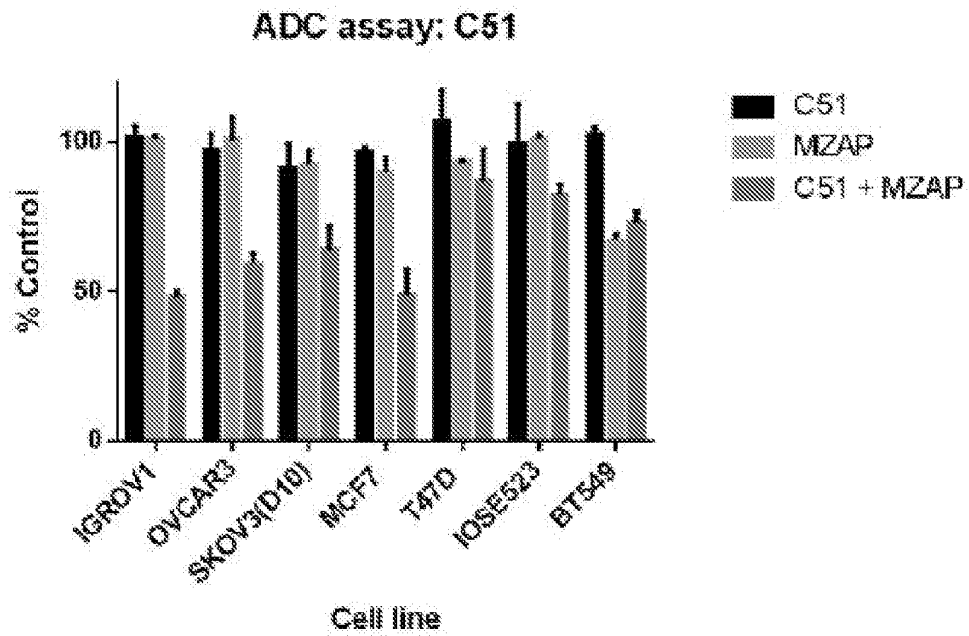
Fig. 4

Fig. 5



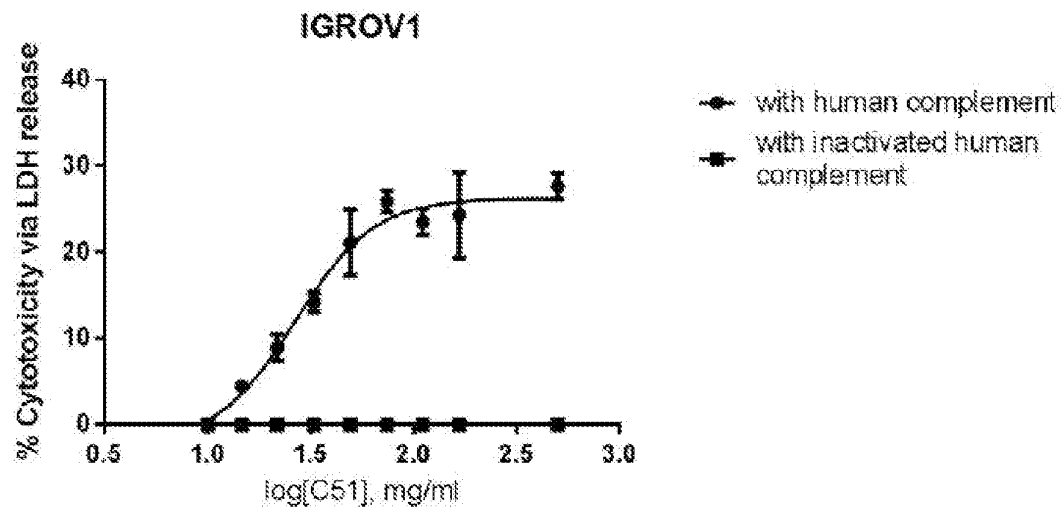
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Fig. 6



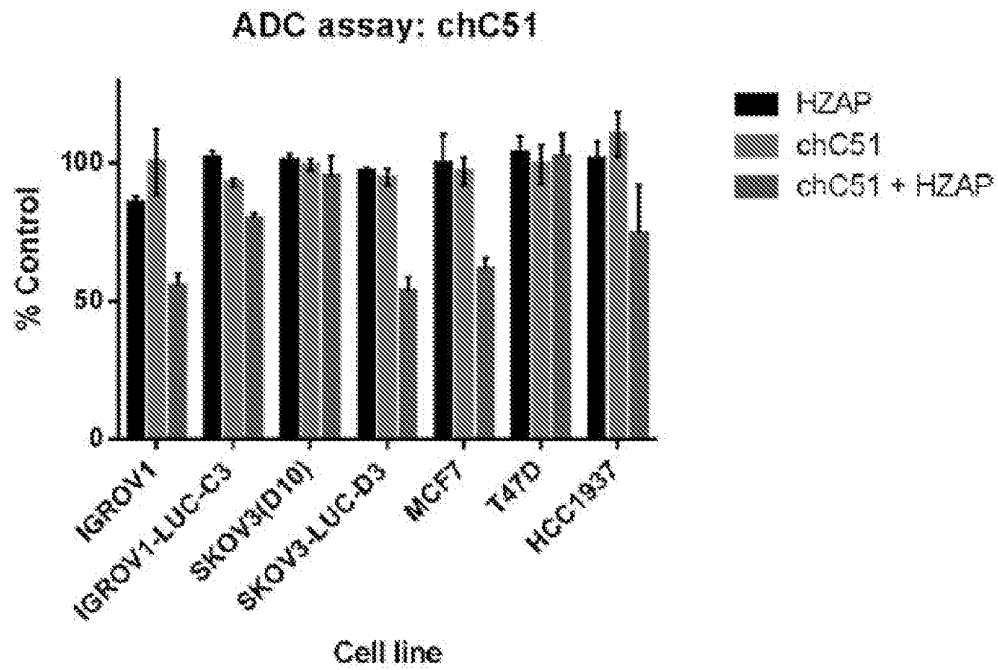
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FIG. 7



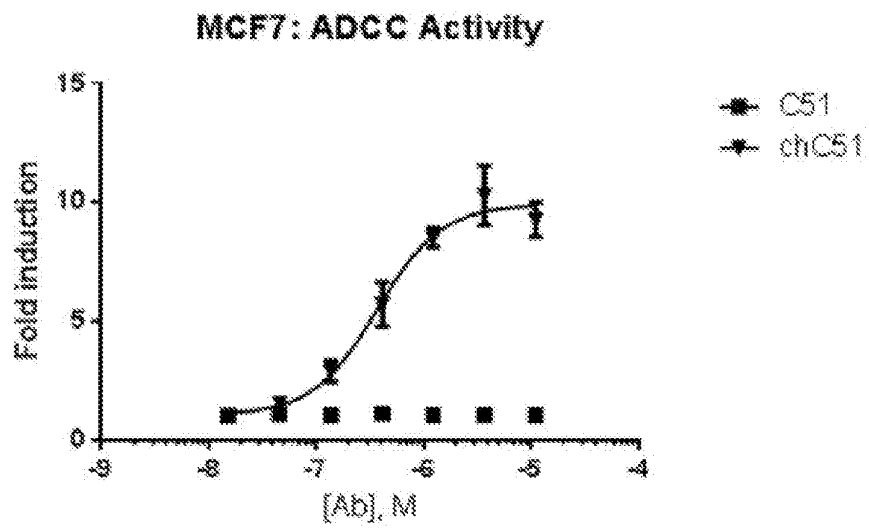
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FIG. 8



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Fig. 9



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Fig. 10

Fig. 10A

Gene Sequence 2448 (Heavy Chain) (SEQ ID NO.:3)

GTACAGCTGCAGGAGTCAGGACCTGACCTGGTGAAACCTTCTCGGTCACCTTTCAC
 TCACCTGCACTGTCACTGGCTACTCCATCACCAGTGGTTATAGCTGGCACTGG
 ATCCGGCAGTTTCCAGGAAACAACTGGAATGGATGGGCTACATACTACAGT
GGTAGCACTAAGTACAACCCATCTCTCAAAAGTCGAATCTCTATCACTCGAGA
 CACATCCAAGAACCAGTTCTTCTGCAAGTTGAATTCTGTGACTACTGAGGACGCA
 GCCACATATTACTGTGCAAGGGGGAGTAACACGGATTGACTACTGGGGCCA
 AGGCACCACTCTCACAGTCTCCTCA

Gene Sequence 2448 (Light Chain) (SEQ ID NO.:4)

GACATTGAGCTCACCCAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGG
 TTACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTAACGATCAAAAG
AACTACTTGGCCTGGTACCAACAGAAACCAGGGCAGTCTCCTAACTGCTGATT
 TACTGGGCATCTATTAGGGAATCTGGGGTCCCTGATCGCTTACAGGCAGTGGA
 TCTGGGACAGATTTCACTCTCACCATCAGCAGTGTGAAGGCTGAAGACCTGGCAG
 TTTATTACTGTCAAGCAATATTATATCTATCCTCTCACGTTTCGGTGCTGGGACCA
 AGCTGGAAATAAAACGG

Fig. 10B

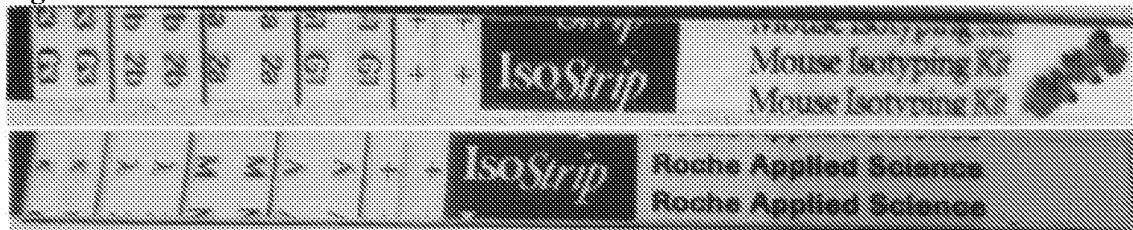
Amino Acid Sequence 2448 (Heavy Chain) (SEQ ID NO.:1)

VQLQESGPD LVKPSRSLTCTVTGYSITSGYSWHWIRQFPGNKLEWMGYIHYSGST
KYNPSLKSRISITRDTSKNQFFLQLNSVTTEDAATYYCARGGSNYGFDYWGQGTTLTV
 SS

Amino Acid Sequence 2448 (Light Chain) (SEQ ID NO.:2)

DIELTQSPSSLA VSVGEKVTMSCKSSQSLLYSNDQKNYLAWYQQKPGQSPKLLIW
ASIRESGVPDRFTGSGSGTDFTLTISSVKAEDLAVYYCQYYIYPLTFGAGTKLEIKR

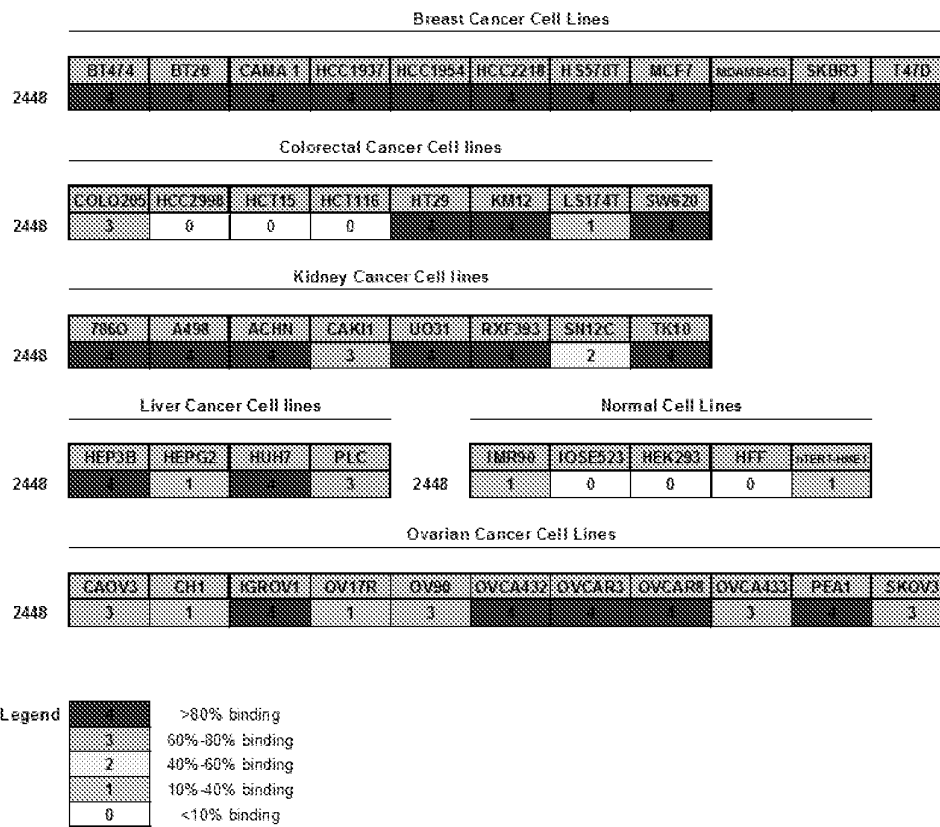
Fig. 10C



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Fig. 11

A



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Fig. 11

B

Ovarian		mAb clone	Breast		mAb clone
EMT Category [†]	Cell line	2448 [†]	EMT Category [†]	Cell line	2448 [†]
E	CaOV3	+++	E	BT474	++++
E	OVCAR3	+++	E	CAMA1	++++
E	OVCAR8	++++	E	HCC2218	++++
E	OV90	+++	E	MDA453	++++
E	IGROV1	++++	E	MCF7	++++
IE	OV17R	+	E	SKBR3	++++
IE	OVCA432	++++	E	T47D	++++
IE	OVCA433	+++	IE	BT20	++++
IM	CH1	+	IE	HCC1937	++++
IM	HEY	-	IM	HCC1954	++++
IM	HEYC2	-	M	MCF10A	++
IM	SKOV3	+++	M	MDA-MB-231	-
IM	SKOV3(D10)	+	M	BT549	-
M	A2780	-	M	HS578T	++
M	COLO720E	-	U	184B5	++++
M	HEYA8	-	U	HCC1395	-
M	OVCAR10	-			
M	TOV112	-			
U	IOSE523	-			

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Fig. 11

C

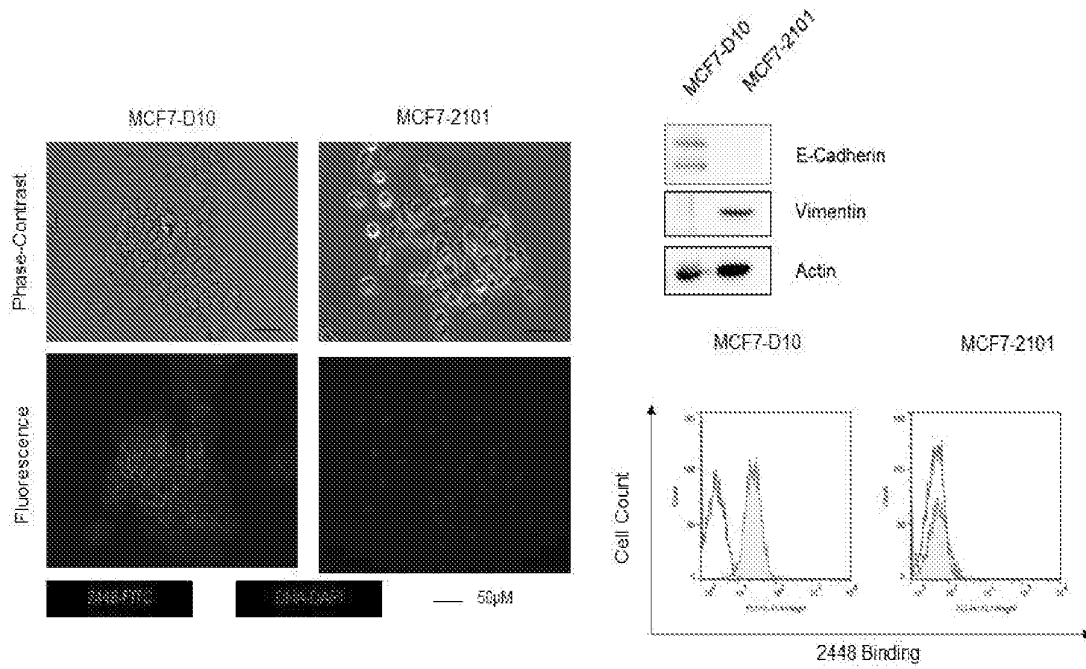
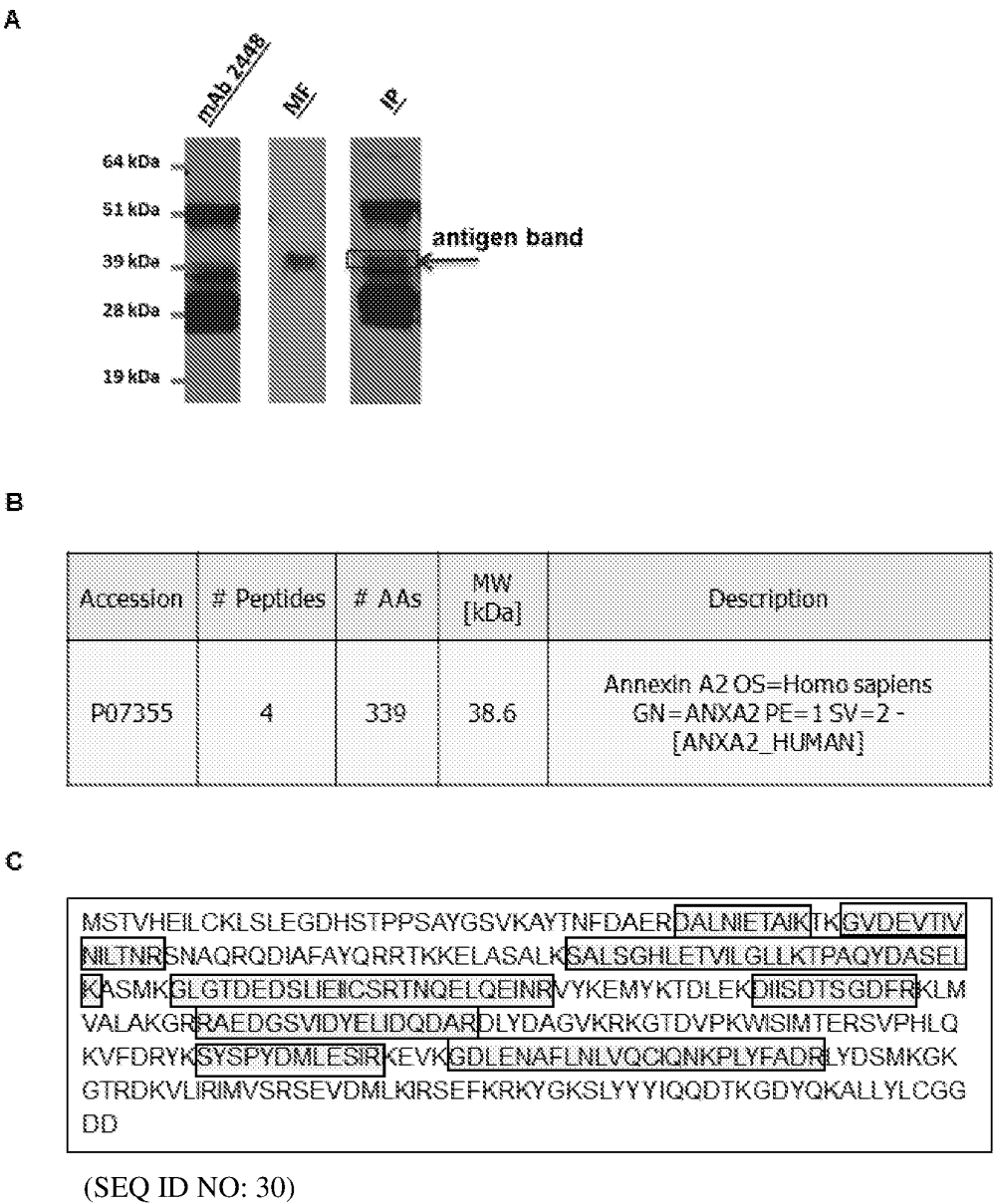
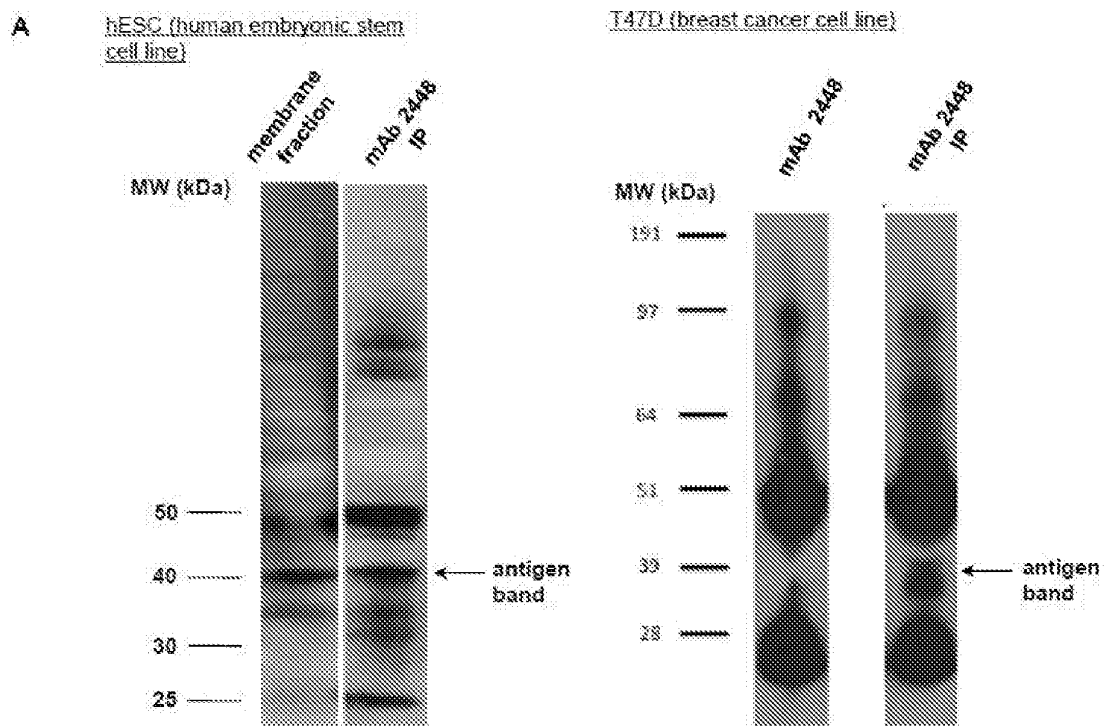


Fig. 12



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Fig. 13

**B hESC mass spectrometry results**

MS/MS sample name	Protein name	Protein Mw(Da)	Protein id Prob.	No. of Unique peptides	% sequence coverage
DataSC-WJ-C2-230610 (F16665)	Annexin A2 OS=Homo sapiens GN=ANXA2	38,568.10	100.00%	11	45.70%
DataSC-WJ-D2-230610 (F16656)	Annexin A2 OS=Homo sapiens GN=ANXA2	38,568.10	100.00%	12	49.90%
DataSC-WJ-E2-230610 (F16658)	Annexin A2 OS=Homo sapiens GN=ANXA2	38,568.10	100.00%	14	54.60%

T47D mass spectrometry results

LCMS sample	Protein Name	% seq coverage	No of Unique Peptides	ProteinMW [kDa]
SC_2448_B_100412	Annexin A2 OS=Homo sapiens GN=ANXA2 PE=1 SV=2	37.46	11	38.6
SC_2448_C_100412	Annexin A2 OS=Homo sapiens GN=ANXA2 PE=1 SV=2	54.57	16	38.6
SC_t_2448C_02	Annexin A2 OS=Homo sapiens GN=ANXA2 PE=1 SV=2 - [ANXA2_HUMAN]	31.86	10	38.6

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Fig. 14

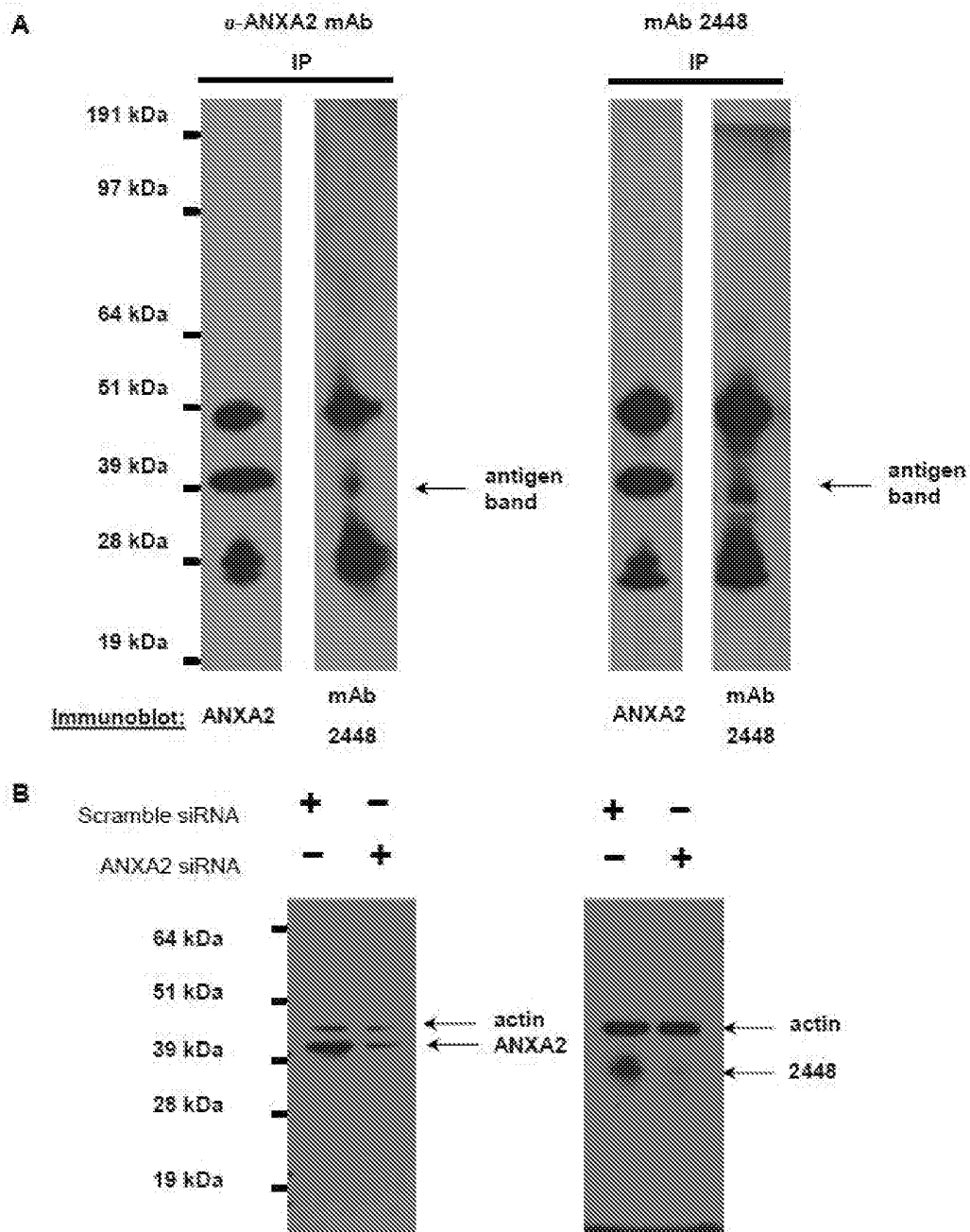
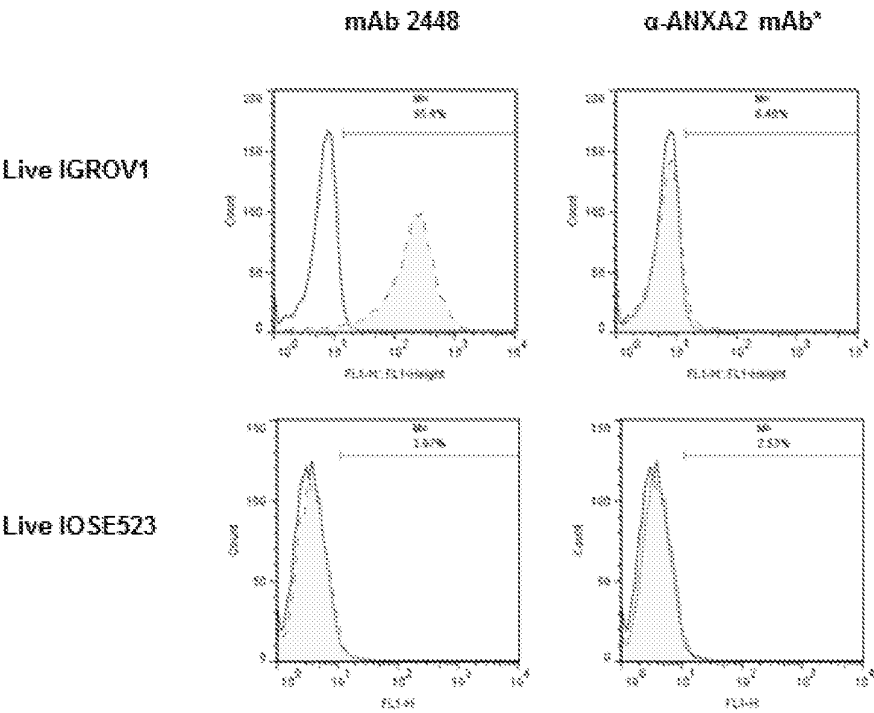


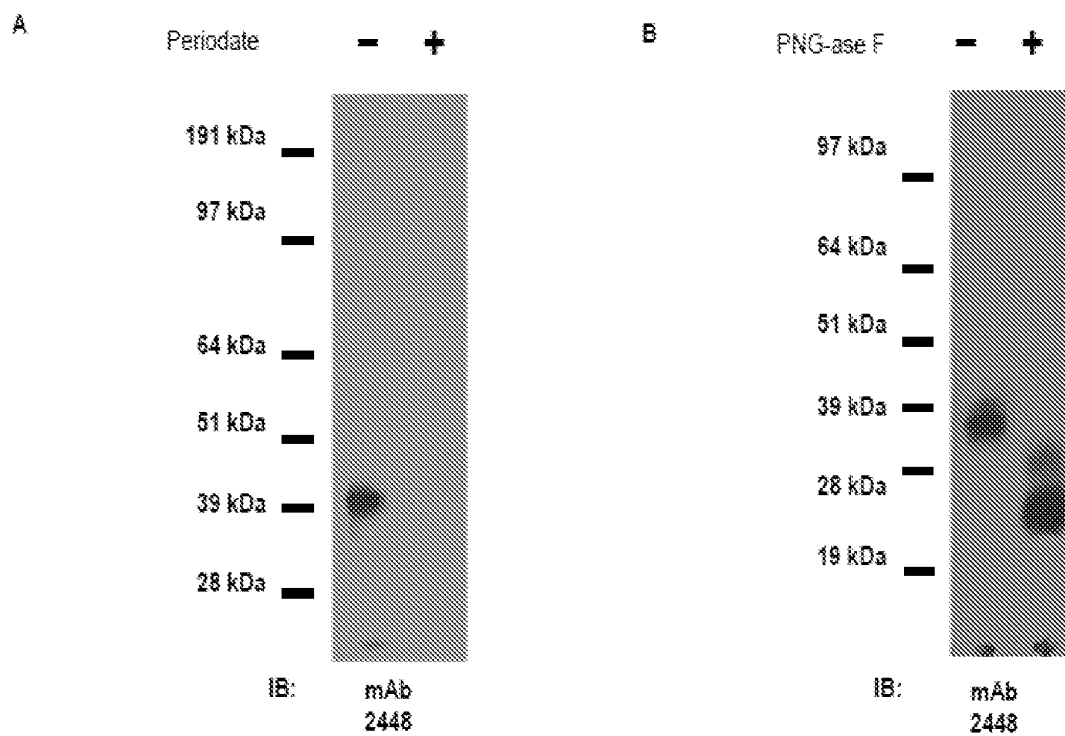
Fig. 15



Designation	Company	Clonality	Species	Isotype	Immunogen
*	BD	Monoclonal	Mouse	IgG1	Human AnnexinII aa.123-328

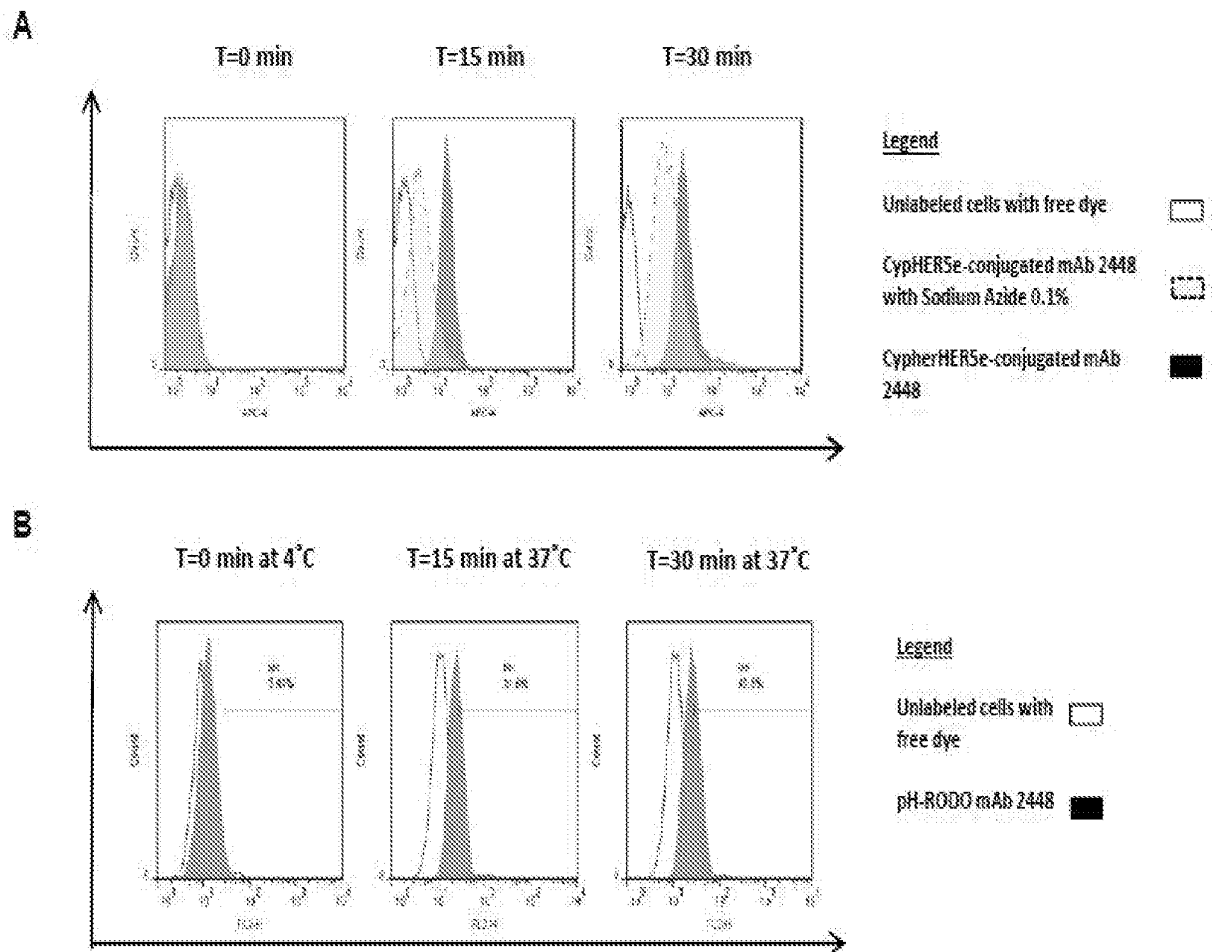
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Fig. 16



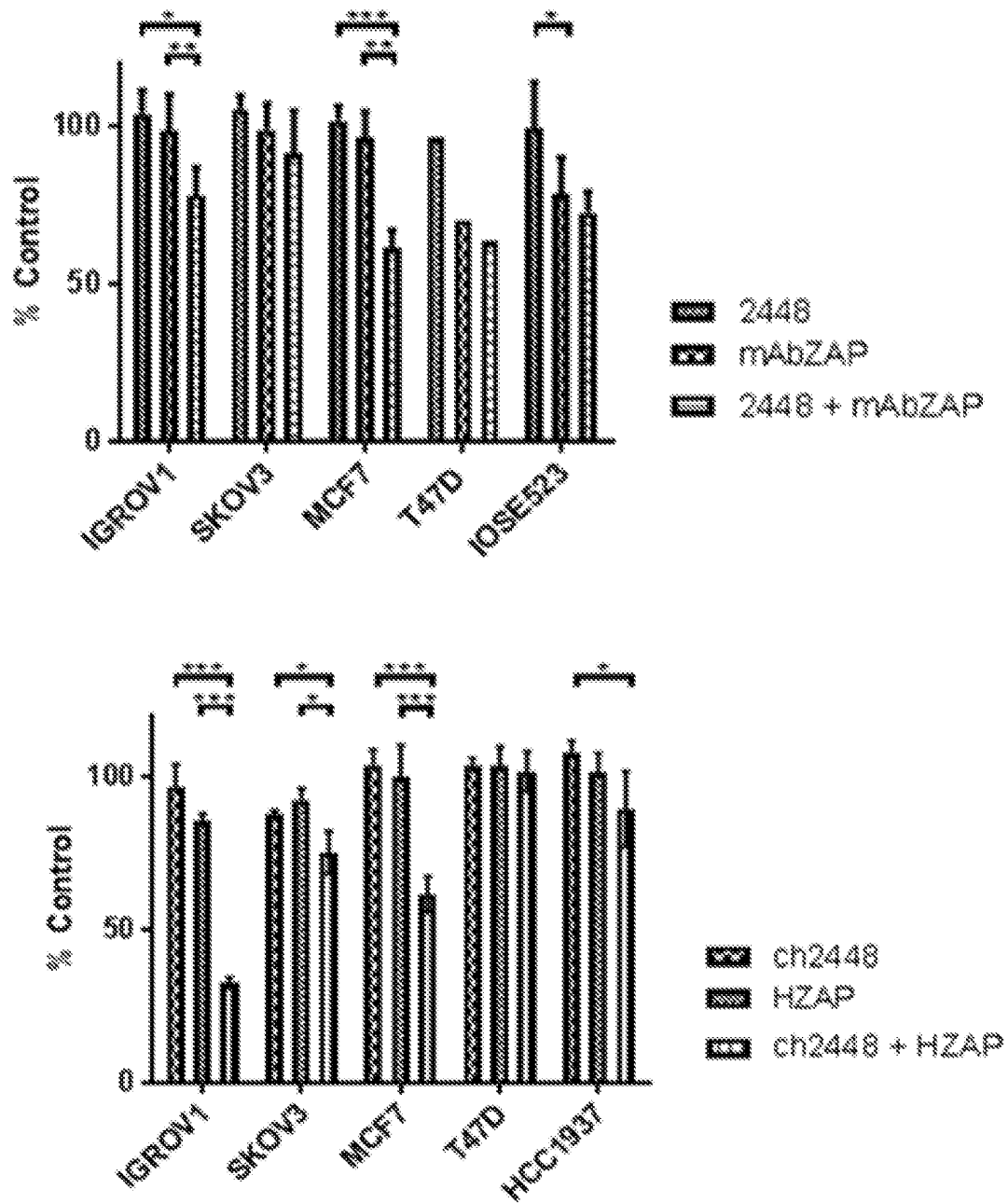
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Fig. 17



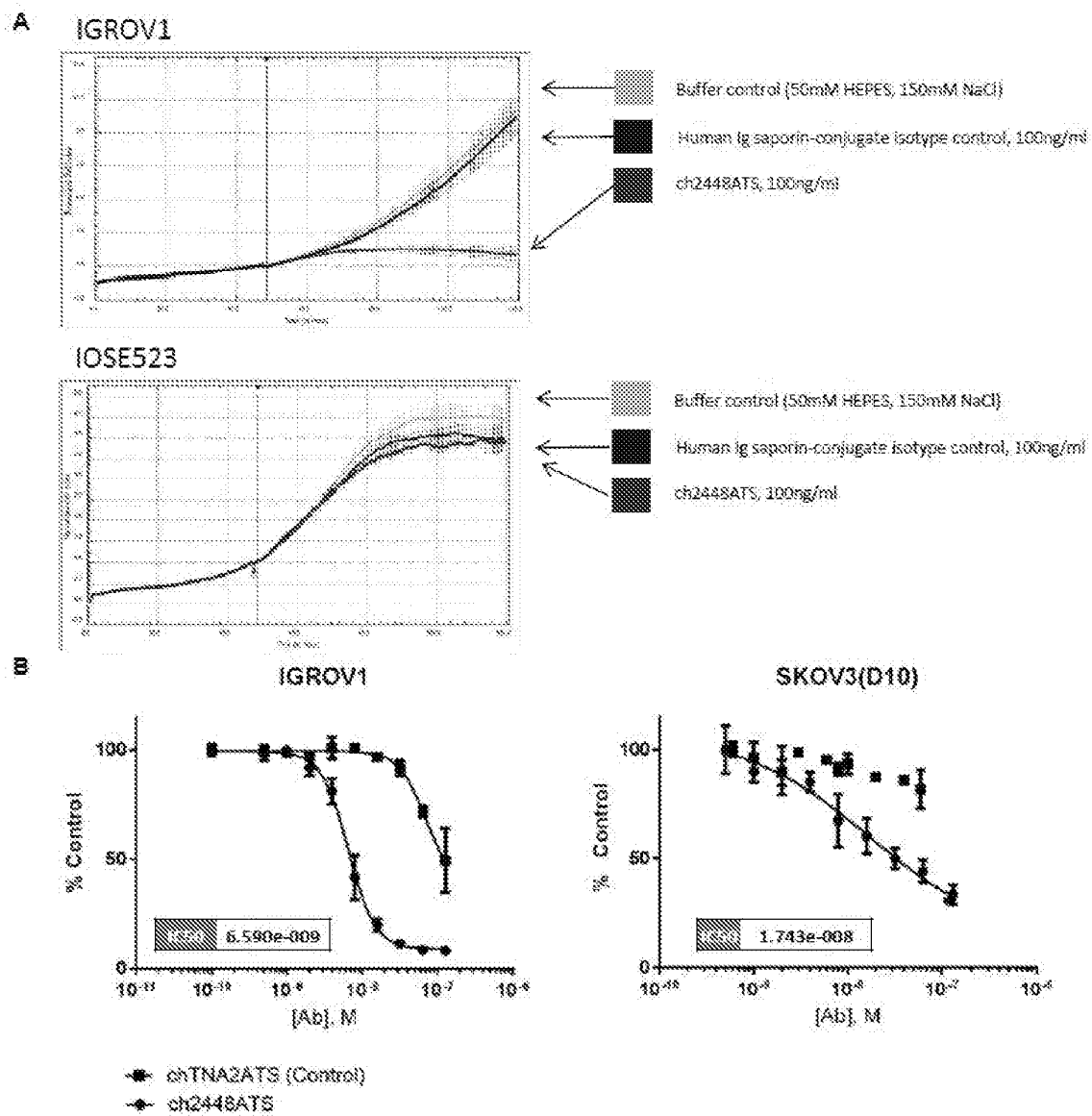
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Fig. 18



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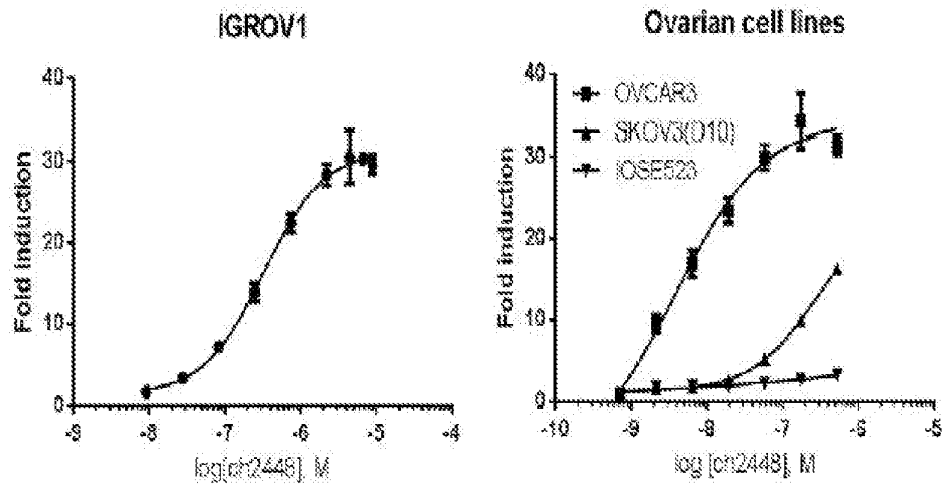
Fig. 19



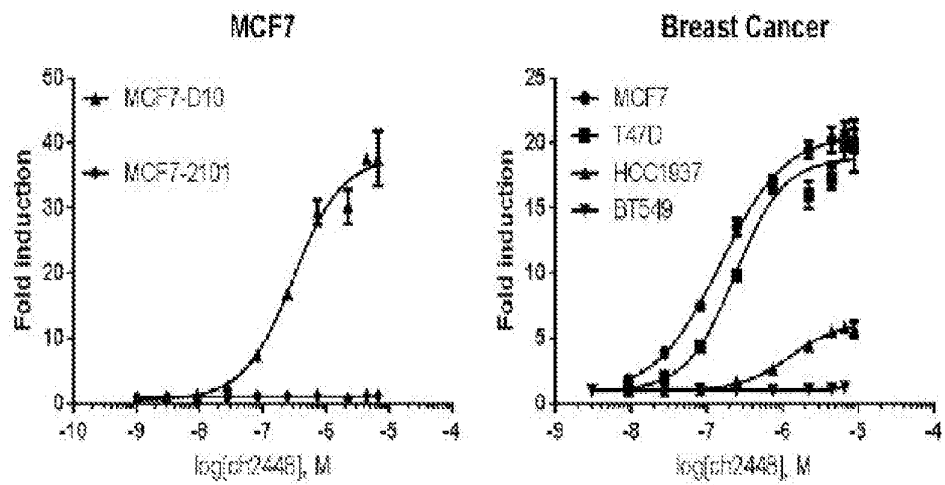
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Fig. 20

A



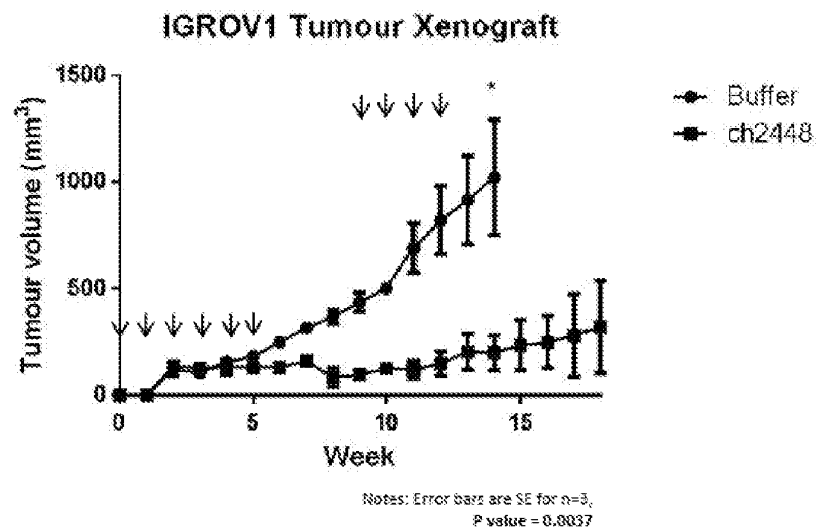
B



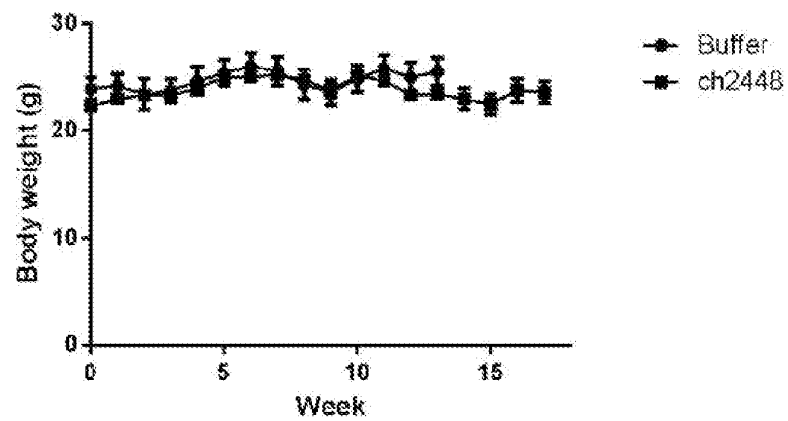
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Fig. 21

A

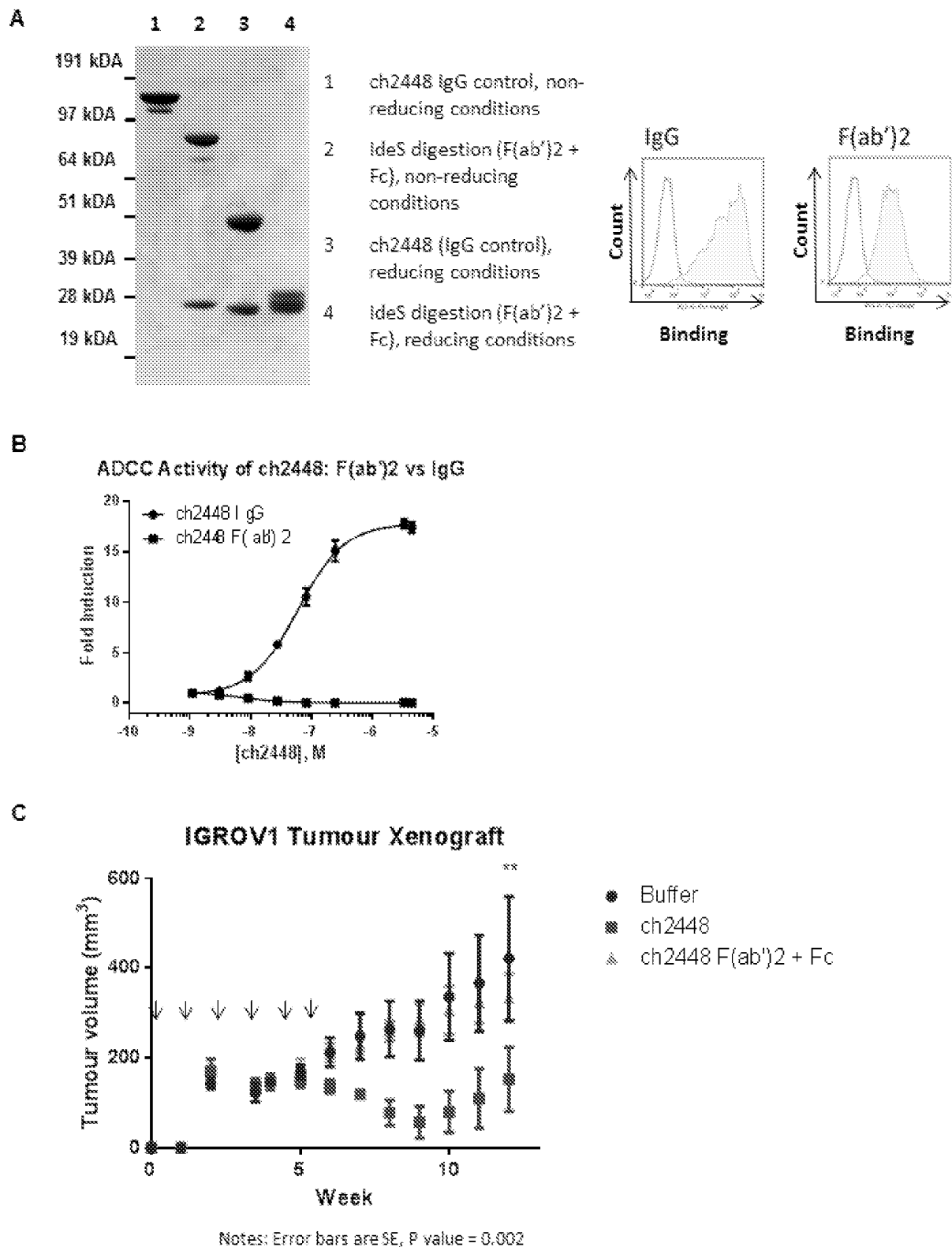


B



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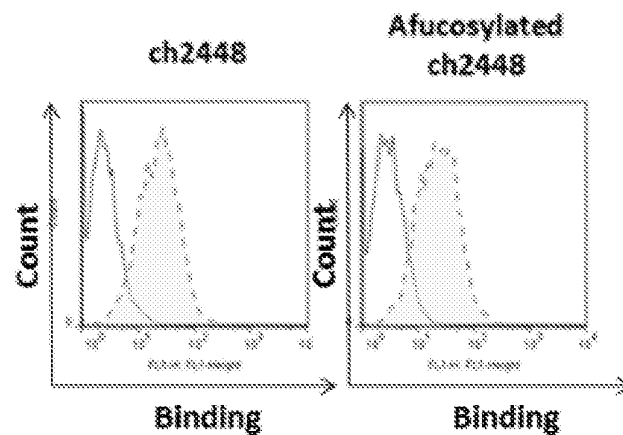
Fig. 22



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Fig. 23

A



B

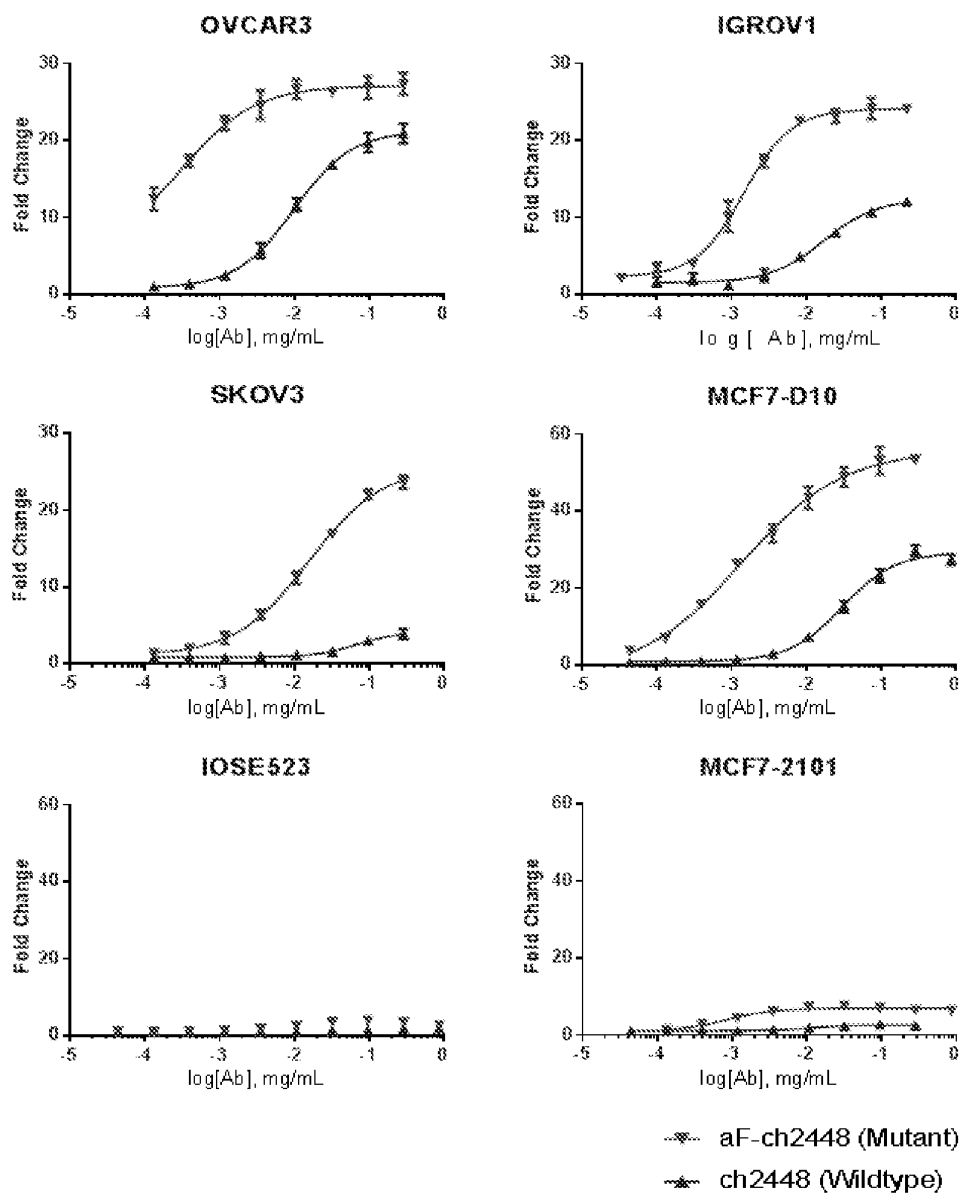


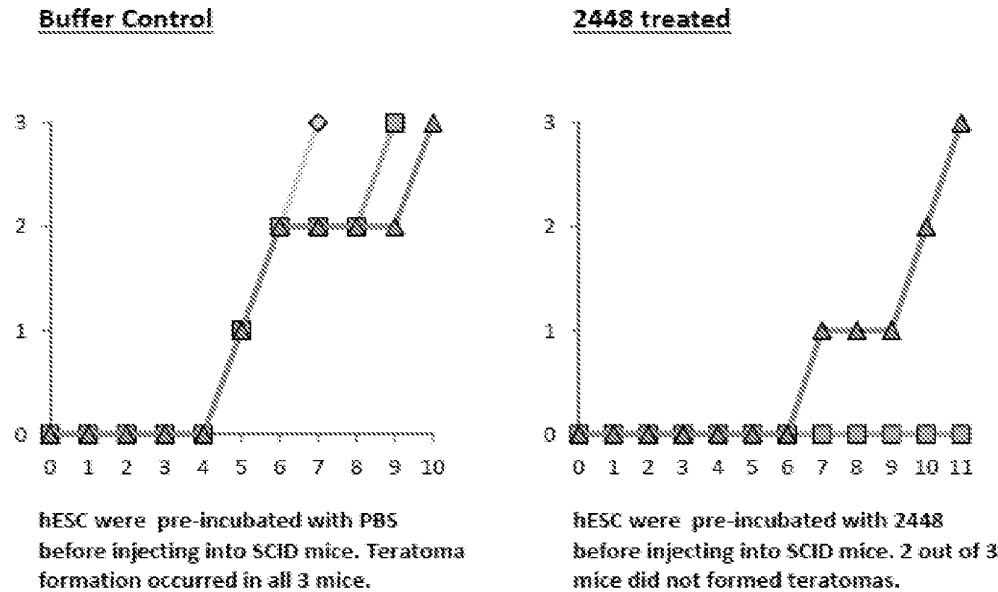
Fig. 24

A

mAb Clone	Isotype	hESC	
		HES-3	EB
mAb2448	IgG1	+++	-

Abbreviations: +, represent binding; +/- , represent partial binding; -, represent no binding; EB, 22 days embryoid bodies.

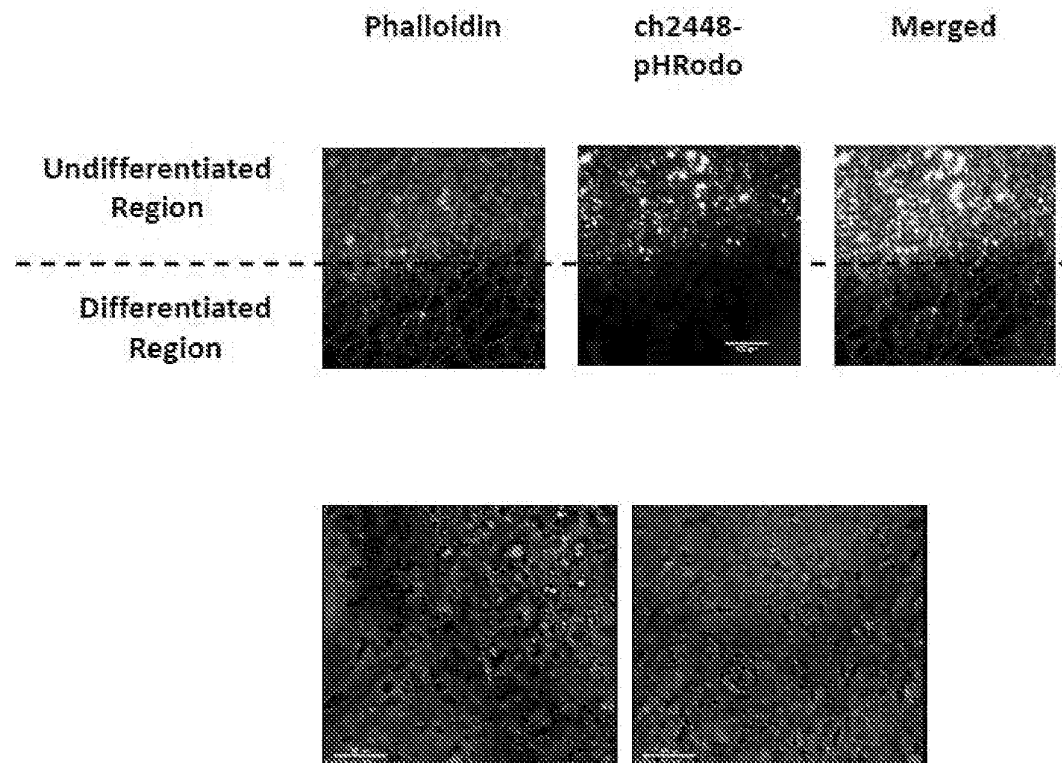
B



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Fig. 25

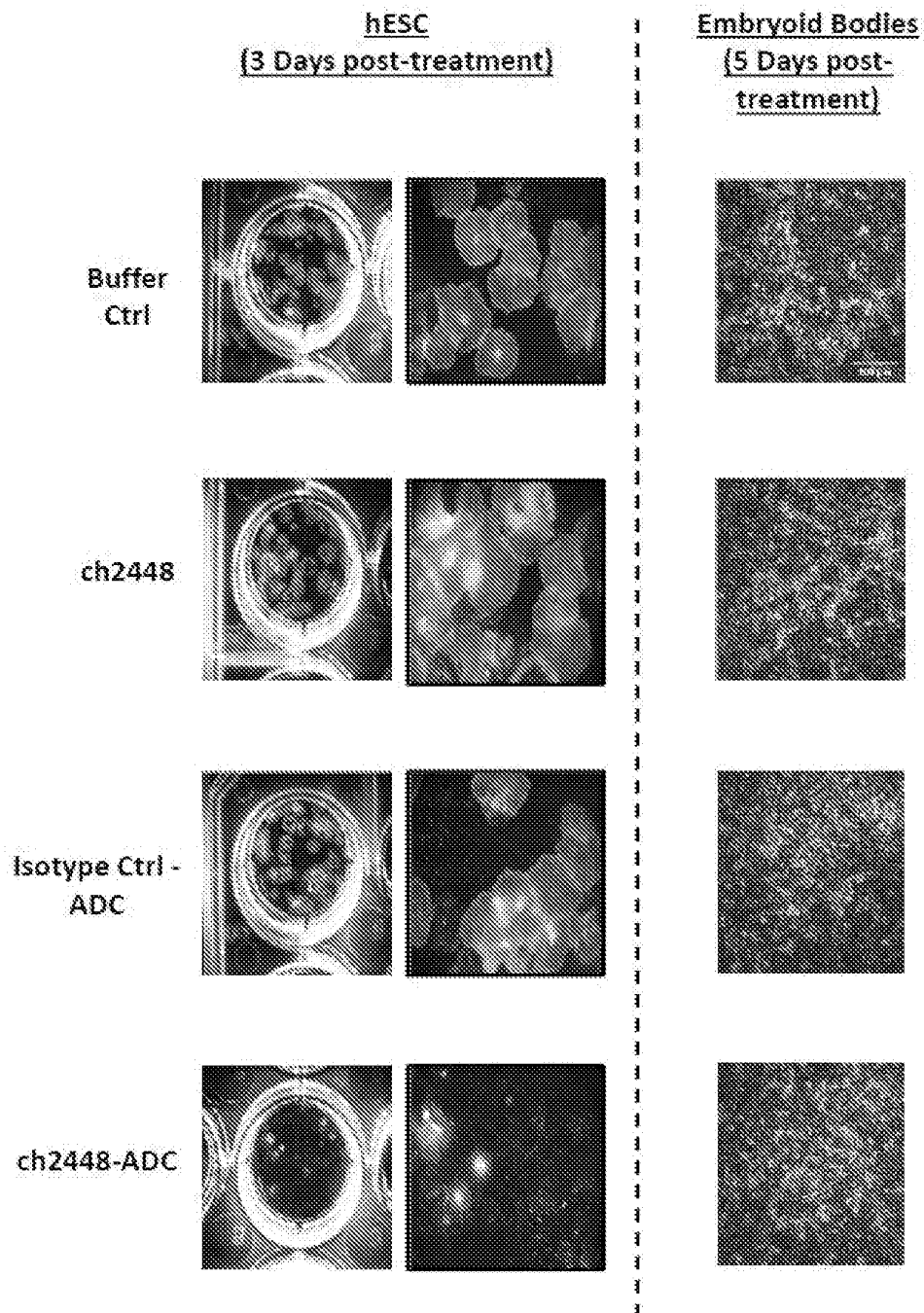
A



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Fig. 25

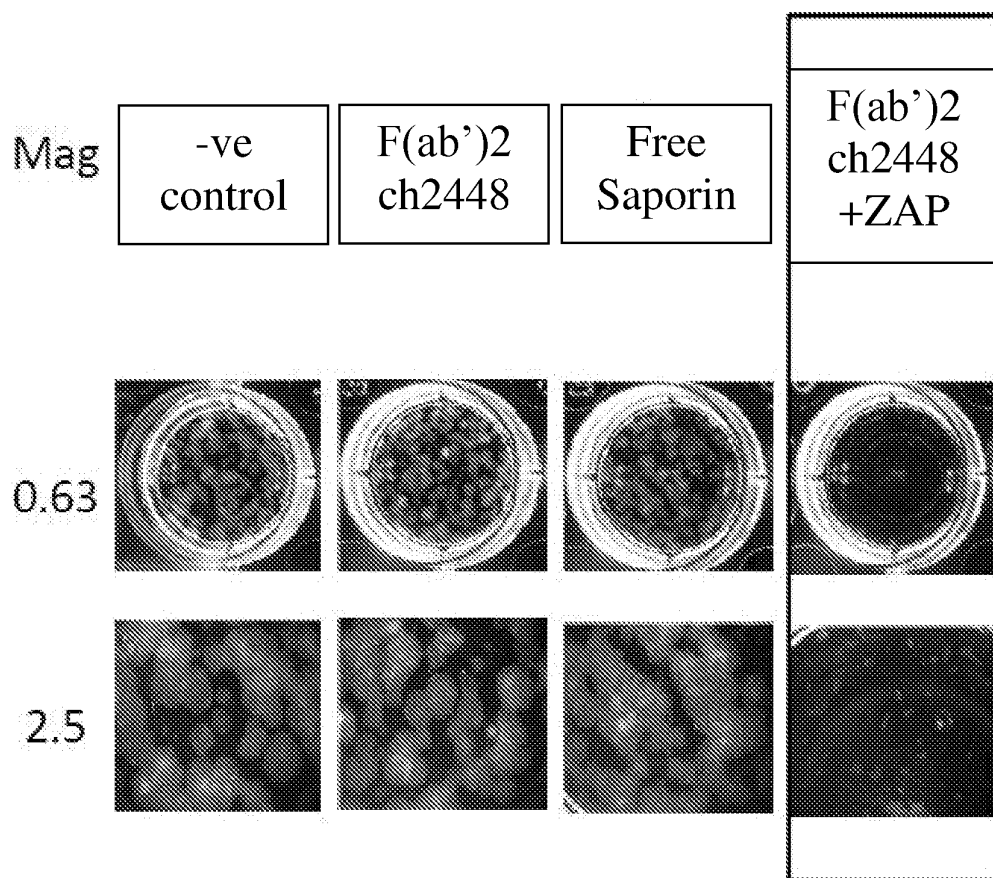
B



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Fig. 25

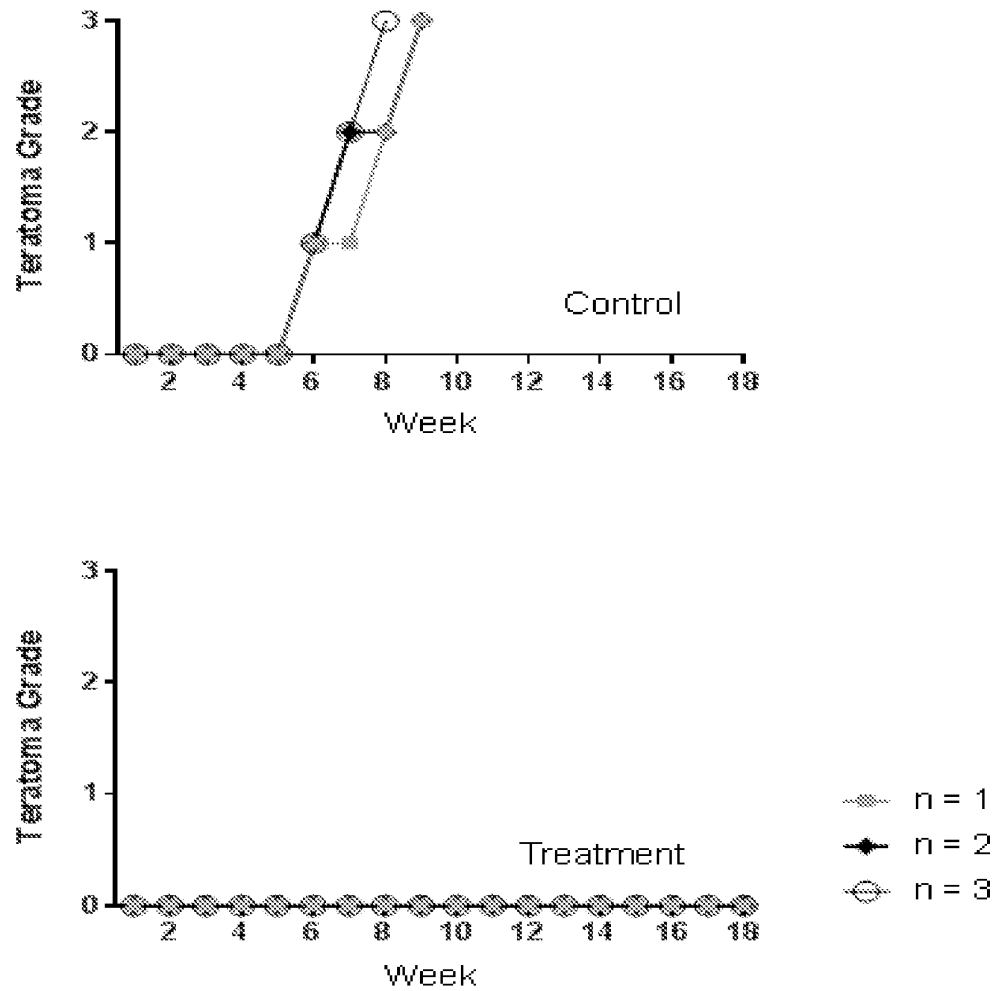
C



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Fig. 26

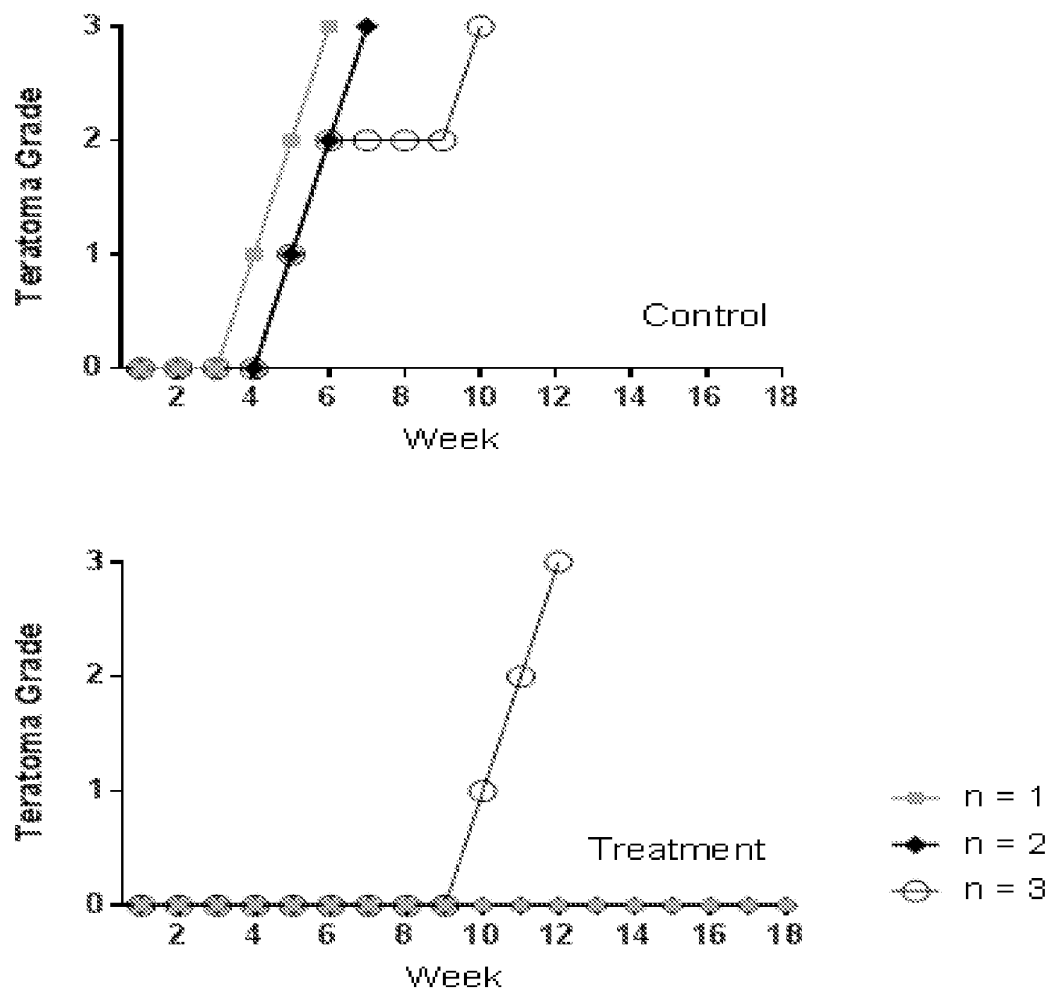
A



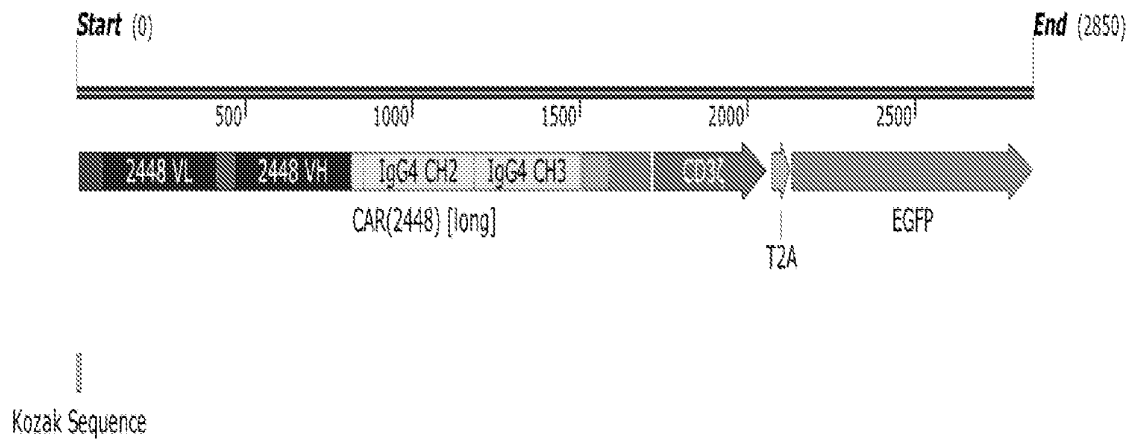
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Fig. 26

B

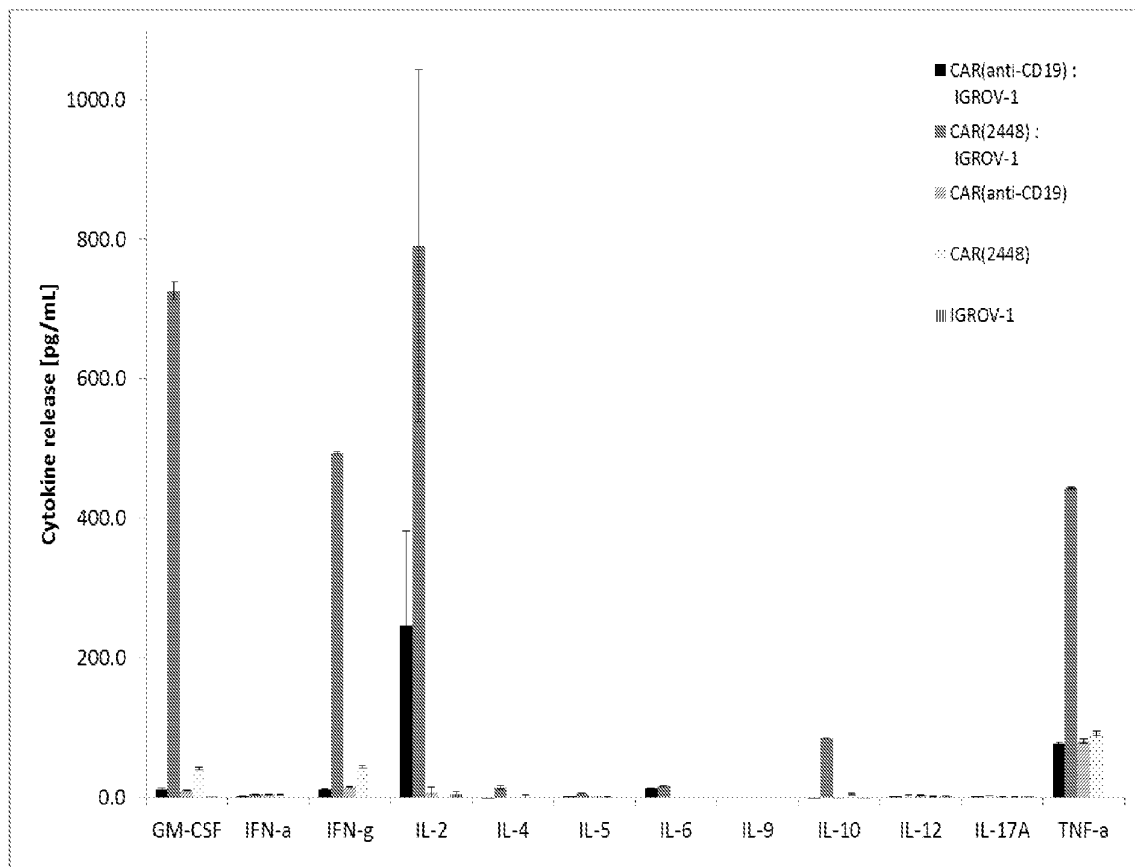


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Fig. 27

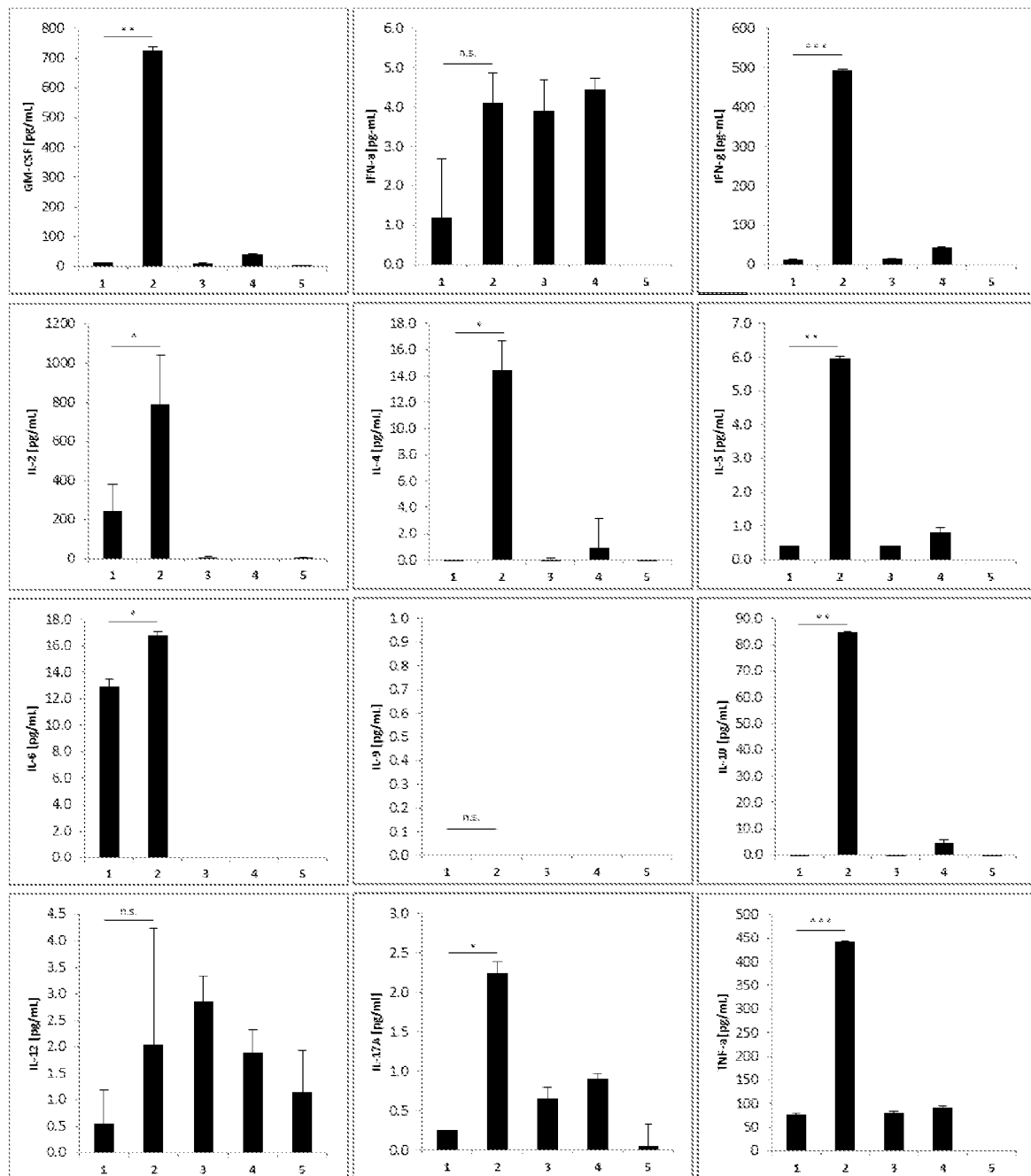
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Fig. 28



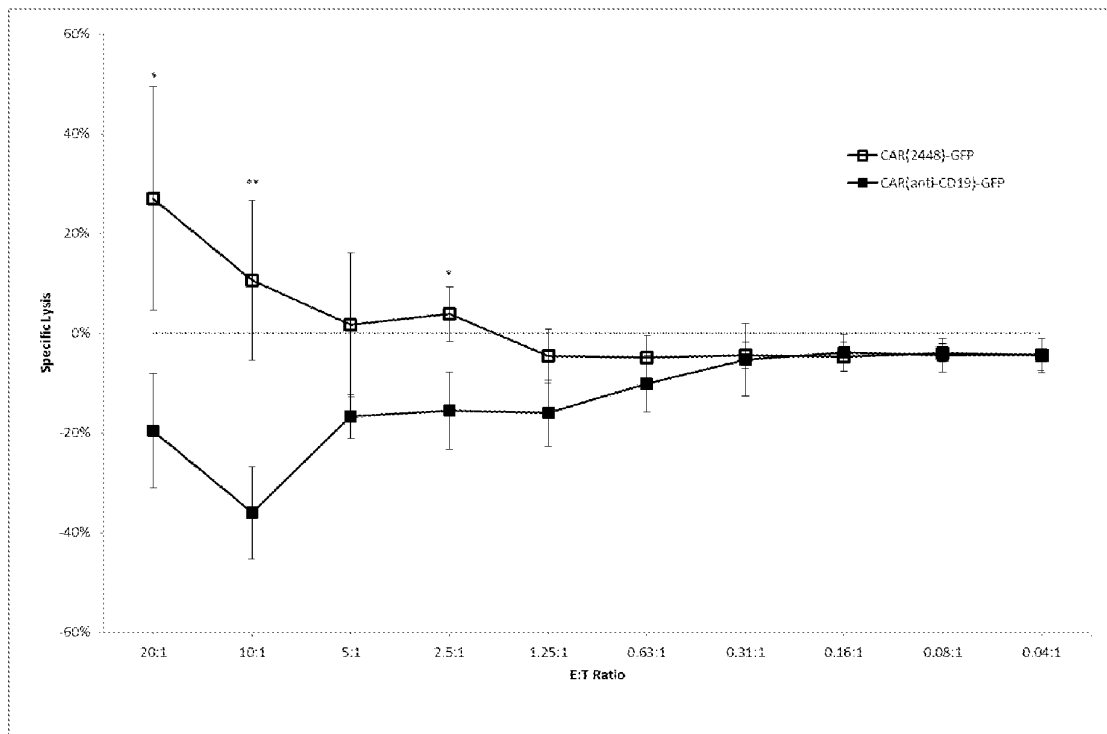
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Fig. 29



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Fig. 30



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Fig. 31

