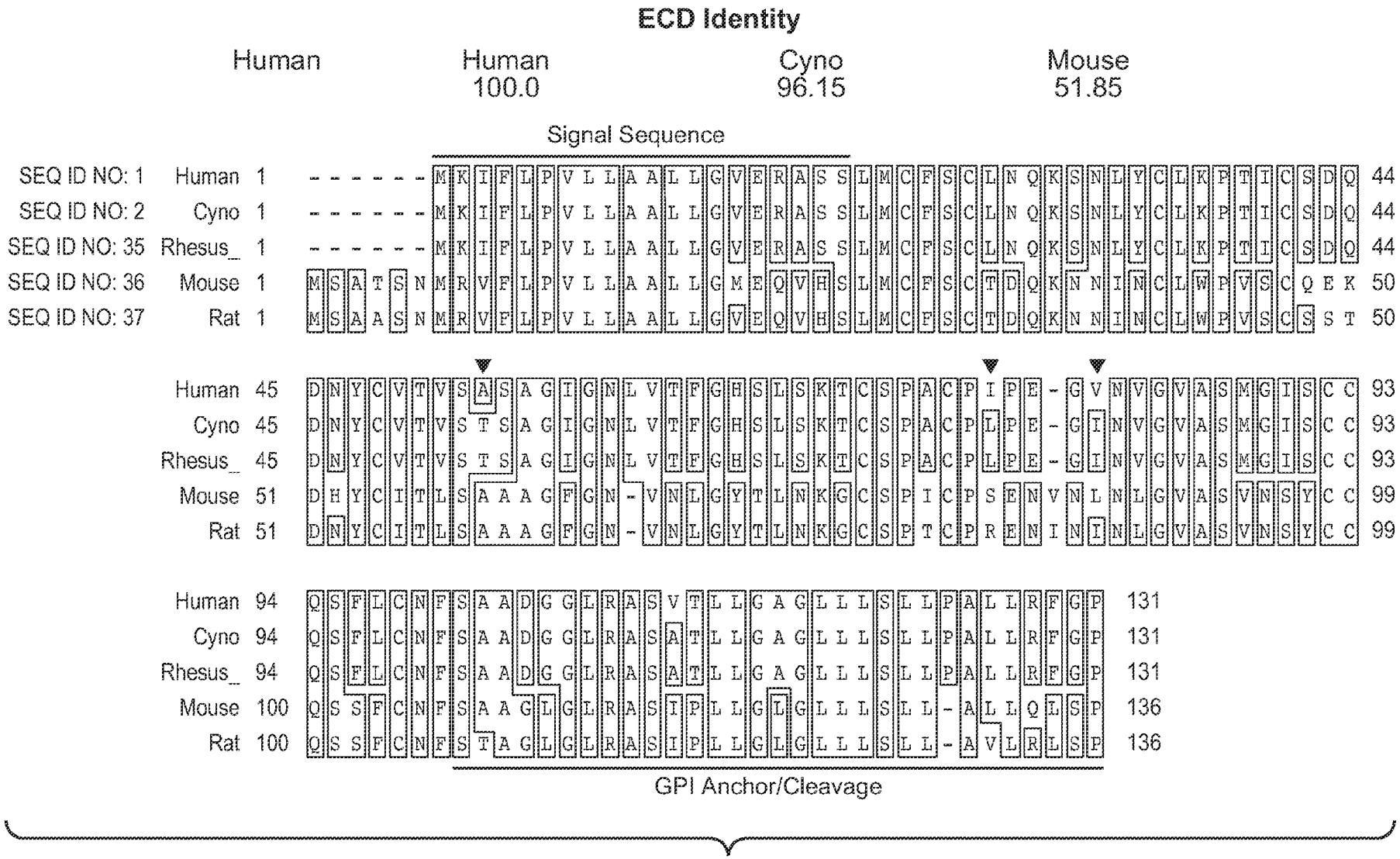

ECD Identity
Human
Human 100.0
Cyno 96.15
Mouse 51.85
Signal Sequence
SEQ ID NO: 1 Human 1 ------MKIFLPVLLAALLGVERASSLMCFSCLNQKSNLYCLKPTICSDQ 44
SEQ ID NO: 2 Cyno 1 ------MKIFLPVLLAALLGVERASSLMCFSCLNQKSNLYCLKPTICSDQ 44
SEQ ID NO: 35 Rhesus_ 1 ------MKIFLPVLLAALLGVERASSLMCFSCLNQKSNLYCLKPTICSDQ 44
SEQ ID NO: 36 Mouse 1 MSATSNMRVFLPVLLAALLGMEQVHSLMCFSCTDQKNNINCLWPVSCQEK 50
SEQ ID NO: 37 Rat 1 MSAASNMRVFLPVLLAALLGVEQVHSLMCFSCTDQKNNINCLWPVSCSST 50
Human 45 DNYCVTVSASAGIGNLVTFGHSLSKTCSPACPIPE-GVNVGVASMGISCC 93
Cyno 45 DNYCVTVSTSAGIGNLVTFGHSLSKTCSPACPLPE-GINVGVASMGISCC 93
Rhesus_ 45 DNYCVTVSTSAGIGNLVTFGHSLSKTCSPACPLPE-GINVGVASMGISCC 93
Mouse 51 DHYCITLSAAAGFGN-VNLGYTLNKGCSPICPSENVNLNLGVASVNSYCC 99
Rat 51 DNYCITLSAAAGFGN-VNLGYTLNKGCSPTCPRENININLGVASVNSYCC 99
Human 94 QSFLCNFSAADGGLRASVTLLGAGLLLSLLPALLRFGP 131
Cyno 94 QSFLCNFSAADGGLRASATLLGAGLLLSLLPALLRFGP 131
Rhesus_ 94 QSFLCNFSAADGGLRASATLLGAGLLLSLLPALLRFGP 131
Mouse 100 QSSFCNFSAAGLGLRASIPLLGLGLLLSLL-ALLQLSP 136
Rat 100 QSSFCNFSTAGLGLRASIPLLGLGLLLSLL-AVLRLSP 136
GPI Anchor/Cleavage

FIG. 1

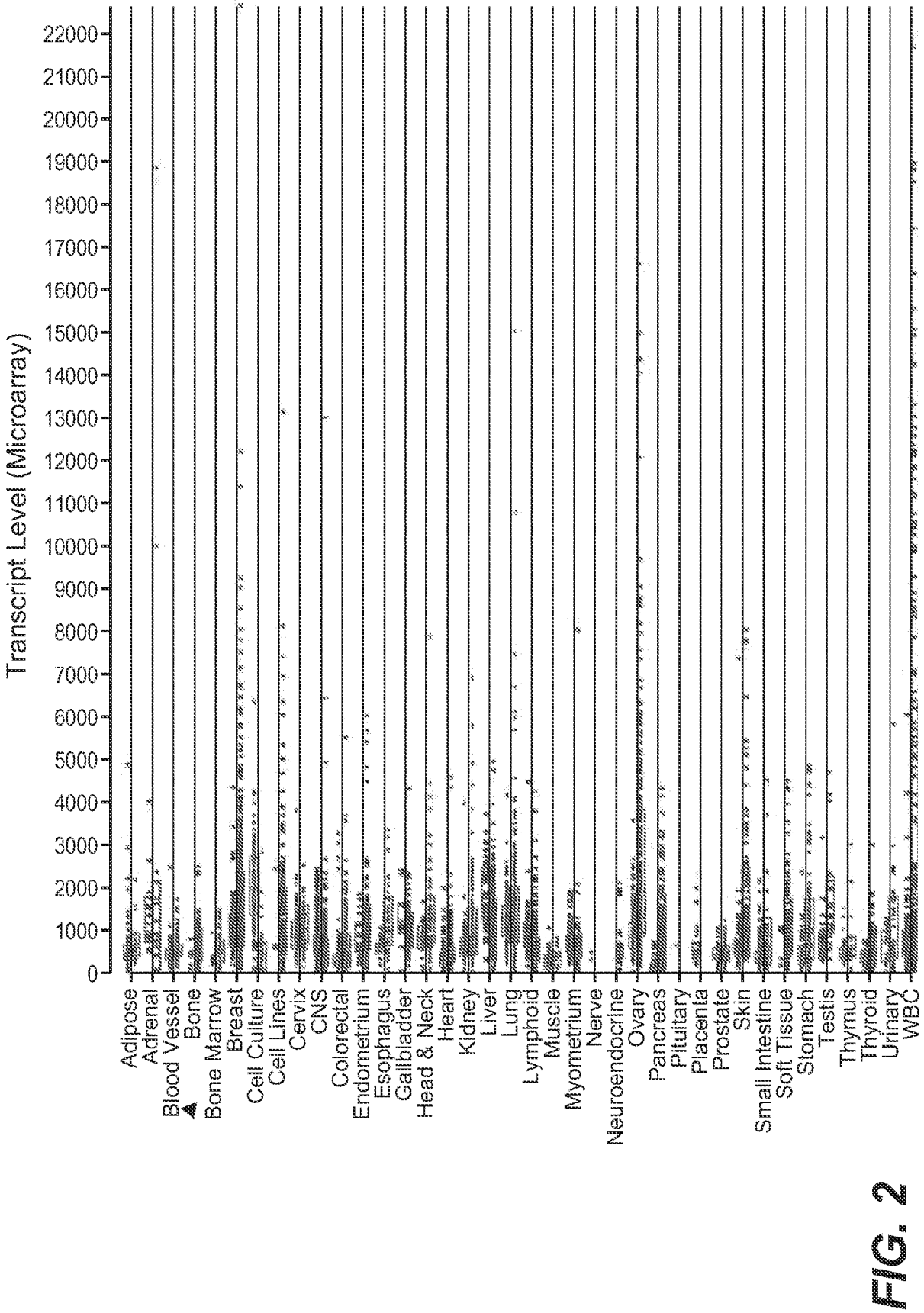

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17000
18000
19000
20000
21000
22000
Adipose
Adrenal
Blood Vessel
Bone
Bone Marrow
Breast
Cell Culture
Cell Lines
Cervix
CNS
Colorectal
Endometrium
Esophagus
Gallbladder
Head & Neck
Heart
Kidney
Liver
Lung
Lymphoid
Muscle
Myometrium
Nerve
Neuroendocrine
Ovary
Pancreas
Pituitary
Placenta
Prostate
Skin
Small Intestine
Soft Tissue
Stomach
Testis
Thymus
Thyroid
Urinary
WBC

FIG. 2

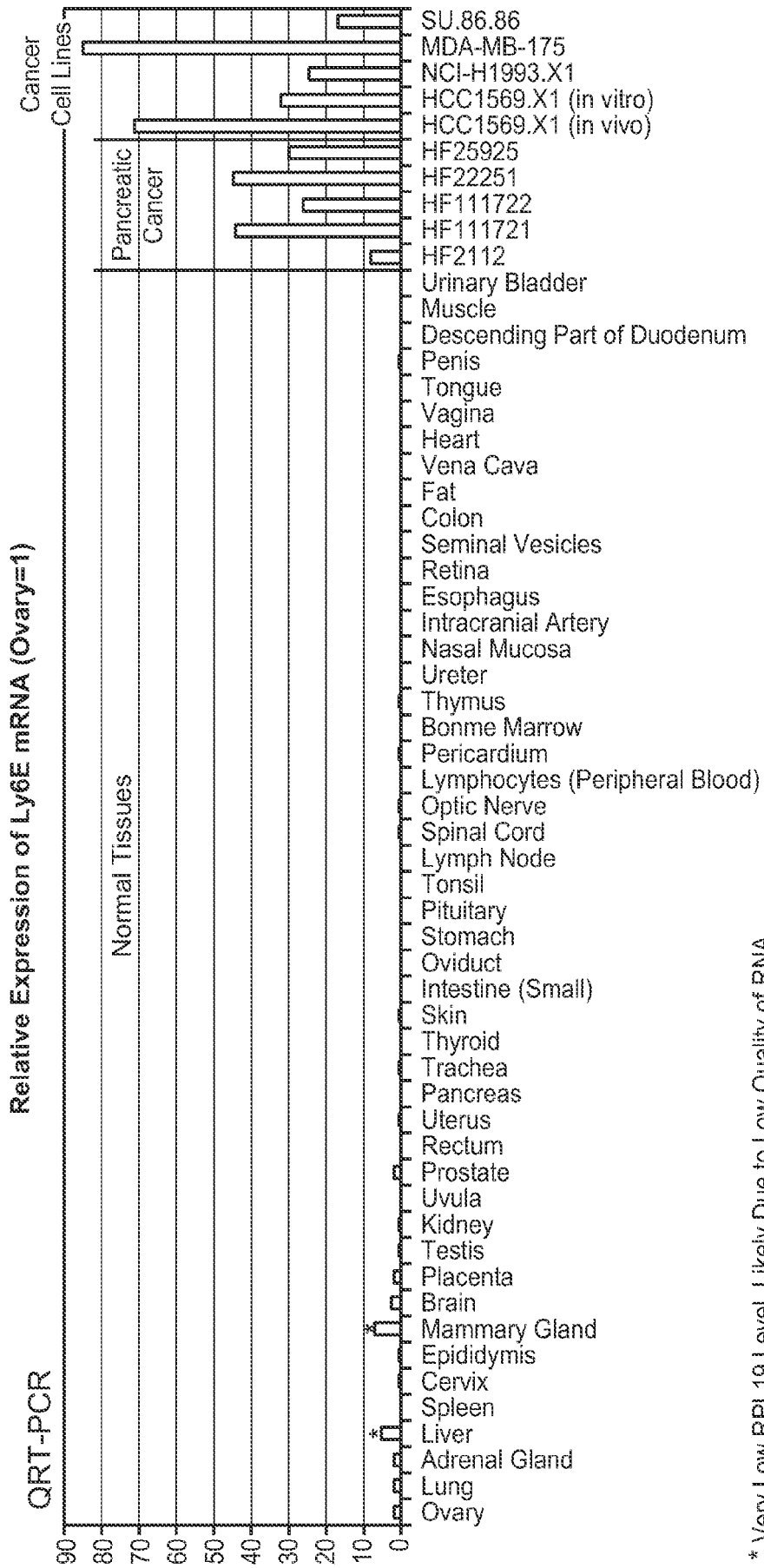

QRT-PCR
Relative Expression of Ly6E mRNA (Ovary=1)
90
80
70
60
50
40
30
20
10
0
Cancer Cell Lines
Pancreatic Cancer
Normal Tissues
SU.86.86
MDA-MB-175
NCI-H1993.X1
HCC1569.X1 (in vitro)
HCC1569.X1 (in vivo)
HF25925
HF22251
HF111722
HF111721
HF2112
Urinary Bladder
Muscle
Descending Part of Duodenum
Penis
Tongue
Vagina
Heart
Vena Cava
Fat
Colon
Seminal Vesicles
Retina
Esophagus
Intracranial Artery
Nasal Mucosa
Ureter
Thymus
Bonme Marrow
Pericardium
Lymphocytes (Peripheral Blood)
Optic Nerve
Spinal Cord
Lymph Node
Tonsil
Pituitary
Stomach
Oviduct
Intestine (Small)
Skin
Thyroid
Trachea
Pancreas
Uterus
Rectum
Prostate
Uvula
Kidney
Testis
Placenta
Brain
Mammary Gland
Epididymis
Cervix
Spleen
Liver
Adrenal Gland
Lung
Ovary
* Very Low RPL19 Level, Likely Due to Low Quality of RNA.
Normal Tissues Listed Above (Ovary, Lung, Adrenal Gland, Liver, Spleen, Cervix, Epididymis, Mammary Gland, Brain, Placenta, Testis, Kidney, Uvula, Prostate, Rectum, Uterus, Pancreas, Trachea, Thyroid, Skin, Intestine (Small), Oviduct, Stomach, Pituitary, Tonsil, Lymph Node, Spinal Cord, Optic Nerve, Lymphocytes (Peripheral Blood), Pericardium, Bone Marrow, Thymus, Ureter, Nasal Mucosa, Intracranial Artery, Esophagus, Retina, Seminal Vesicles, Colon, Fat, Vena Cava, Heart, Vagina, Tongue, Penis, Descending Part of Duodenum, Muscle, Urinary Bladder)

FIG. 3

Light Chain, Kappa:

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
	Kabat number																																				
SEQ ID NO:45	Kappa I consensus	D	I	Q	M	T	Q	S	P	S	S	L	S	A	S	V	G	D	R	V	T	I	T	C	R	A	S	Q	G	I	S	S	Y	L	A	W	Y
SEQ ID NO:4	xLy6E mu9B12	D	I	Q	M	T	Q	T	T	S	S	L	S	A	S	L	G	D	R	V	T	I	S	C	S	A	S	Q	G	I	S	N	Y	L	N	W	Y
SEQ ID NO:3	hu9B12.v12	D	I	Q	M	T	Q	S	P	S	S	L	S	A	S	V	G	D	R	V	T	I	T	C	S	A	S	Q	G	I	S	N	Y	L	N	W	Y

CDR L1

		37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
	Kabat number																																			
	Kappa I consensus	Q	Q	K	P	G	K	A	P	K	L	L	I	Y	A	A	S	S	L	Q	S	G	V	P	S	R	F	S	G	S	G	S	G	T	D	F
	xLy6E mu9B12	Q	Q	K	P	D	G	T	V	K	L	L	I	Y	T	T	S	N	L	A	S	G	V	P	S	R	F	S	G	S	G	S	G	T	D	Y
	hu9B12.v12	Q	Q	K	P	G	K	T	V	K	L	L	I	Y	Y	T	S	N	L	H	S	G	V	P	S	R	F	S	G	S	G	S	G	T	D	Y

CDR L2

		72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107
	Kabat number																																				
	Kappa I consensus	T	L	T	I	S	S	L	Q	P	E	D	F	A	T	Y	Y	C	Q	Q	Y	Y	S	Y	P	-	-	-	-	-	-	-	-	-	-	-	-
	xLy6E mu9B12	S	L	T	I	S	N	L	E	P	E	D	I	A	T	Y	Y	C	Q	Q	Y	S	E	L	P	-	-	-	-	-	-	-	-	-	-	-	-
	hu9B12.v12	T	L	T	I	S	S	L	Q	P	E	D	F	A	T	Y	Y	C	Q	Q	Y	S	E	L	P	-	-	-	-	-	-	-	-	-	-	-	-

CDR L3

FIG. 4

Heavy Chain:

CDR H1

	Kabat number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	a	b	36	37	38	39	40	41	42	43	44
SEQ ID NO:46	VH2 consensus	E	V	Q	L	V	E	S	G	P	A	L	V	K	P	T	Q	T	L	T	L	T	C	T	F	S	G	F	S	L	S	T	S	G	V	G	V	S	W	I	R	Q	P	P	G	K	A
SEQ ID NO:6	xLy6E mu9B12	Q	V	Q	L	K	E	S	G	P	G	L	V	A	P	S	Q	S	L	S	L	T	C	T	V	S	G	F	S	L	T	G	Y	S	V	N	·	·	W	V	R	Q	P	P	G	K	G
SEQ ID NO:5	hu9B12.v12	E	V	Q	L	V	E	S	G	P	A	L	V	K	P	T	Q	T	L	T	L	T	C	T	V	S	G	F	S	L	T	G	Y	S	V	N	·	·	W	I	R	Q	P	P	G	K	A

CDR H2

	Kabat number	45	46	47	48	49	50	51	52		53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	A	B	C	83	84
	VH2 consensus	L	E	W	L	A	L	I	D	·	·	W	N	D	D	K	R	Y	S	P	S	L	K	S	R	L	T	I	S	K	D	T	S	K	N	Q	V	V	L	T	M	T	N	M	D	P
	xLy6E mu9B12	L	E	W	L	G	M	I	W	·	·	G	D	G	S	T	D	Y	N	S	A	L	K	S	R	L	T	I	S	K	D	N	S	K	S	Q	V	E	L	K	M	N	S	L	Q	T
	hu9B12.v12	L	E	W	L	G	M	I	W	·	·	G	D	G	S	T	D	Y	N	S	A	L	K	S	R	L	T	I	S	K	D	T	S	K	N	Q	V	V	L	T	M	T	N	M	Q	P

CDR H3

	Kabat number	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	A	B	C	·	·	·	·	·	·	·	·	D	101	102	103	104	105	106	107	108	109	110	111	112	113
	VH2 consensus	V	D	T	A	T	Y	Y	C	A	R	D	T	A	A	Y	·	·	·	·	·	·	·	·	·	·	·	·	F	D	Y	W	G	Q	G	T	L	V	T	V	S	S
	xLy6E mu9B12	D	D	T	A	R	Y	Y	C	A	R	D	Y	Y	F	N	Y	A	S	W	·	·	·	·	·	·	·	·	F	A	Y	W	G	R	G	T	L	V	T	V	S	A
	hu9B12.v12	V	D	T	A	T	Y	Y	C	A	R	D	Y	Y	F	N	Y	A	S	W	·	·	·	·	·	·	·	·	F	A	Y	W	G	Q	G	T	L	V	T	V	S	S

FIG. 5

Heavy Chain:

FIG. 6

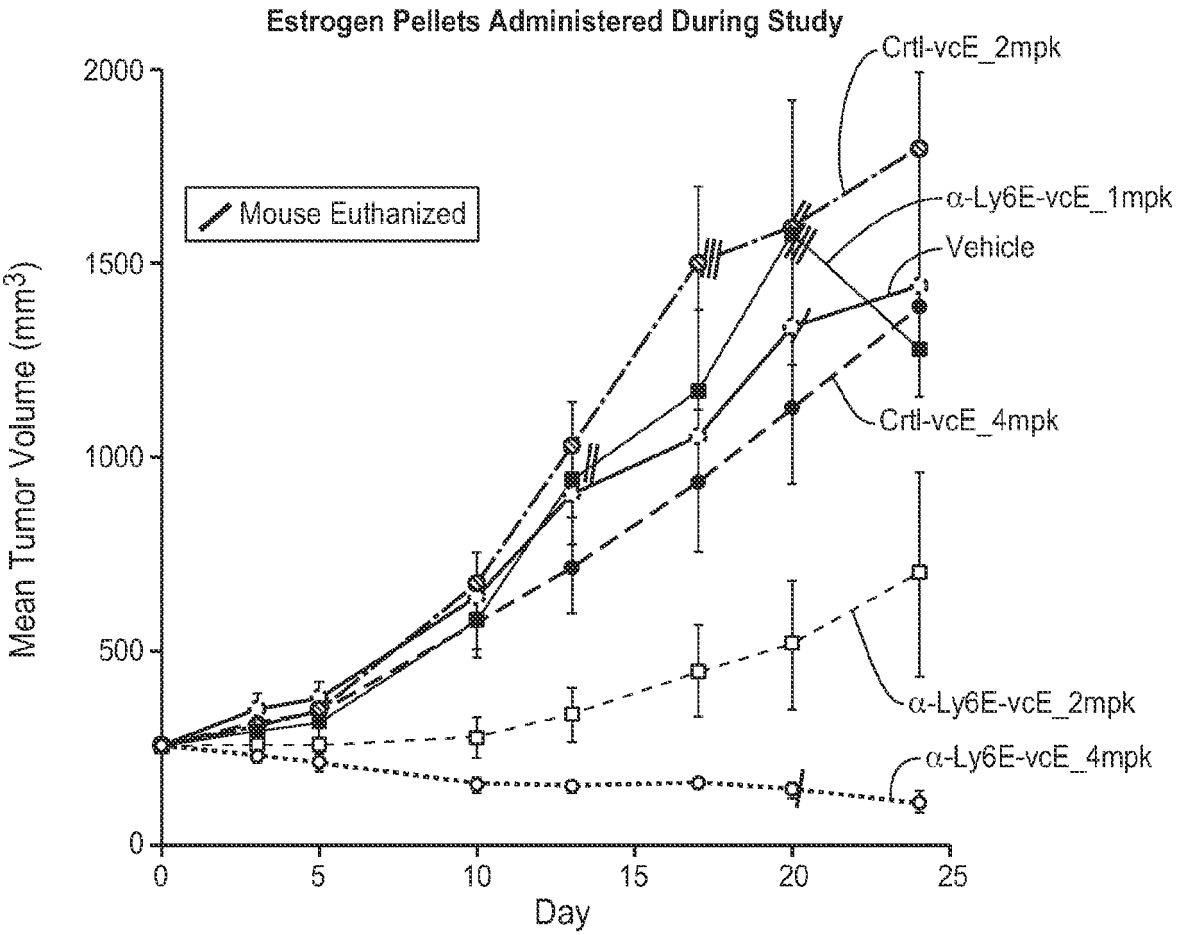

Estrogen Pellets Administered During Study
Mean Tumor Volume (mm3)
Day
Mouse Euthanized
Crtl-vcE_2mpk
α-Ly6E-vcE_1mpk
Vehicle
Crtl-vcE_4mpk
α-Ly6E-vcE_2mpk
α-Ly6E-vcE_4mpk
0
500
1000
1500
2000
0
5
10
15
20
25

FIG. 7A

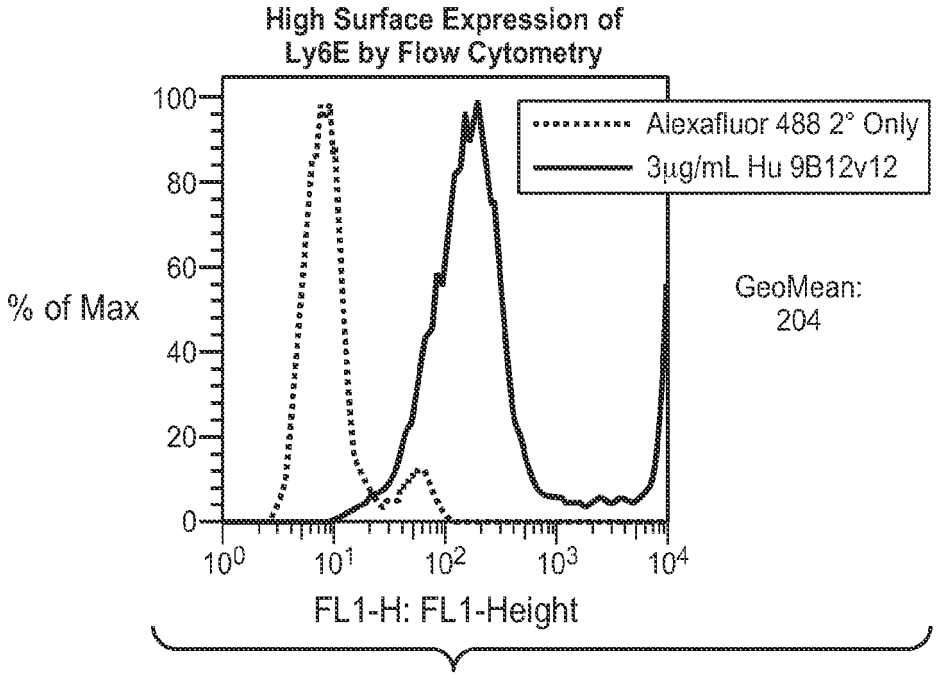

High Surface Expression of
Ly6E by Flow Cytometry
% of Max
Alexafluor 488 2° Only
3µg/mL Hu 9B12v12
GeoMean:
204
FL1-H: FL1-Height

FIG. 7B

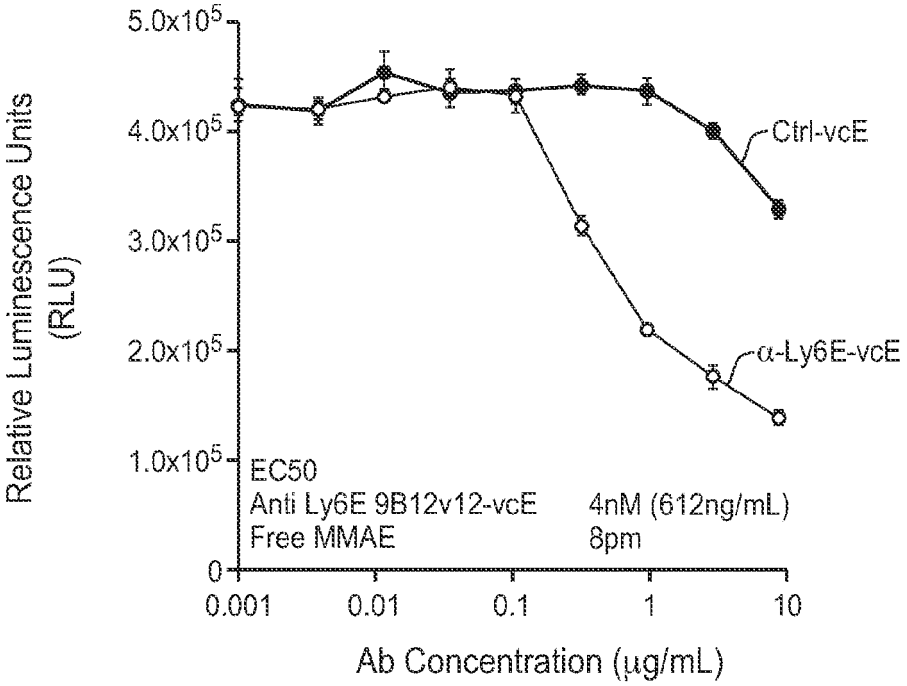

Relative Luminescence Units (RLU)
5.0x10^5
4.0x10^5
3.0x10^5
2.0x10^5
1.0x10^5
0
Ctrl-vcE
α-Ly6E-vcE
EC50
Anti Ly6E 9B12v12-vcE 4nM (612ng/mL)
Free MMAE 8pm
0.001
0.01
0.1
1
10
Ab Concentration (μg/mL)

FIG. 7C

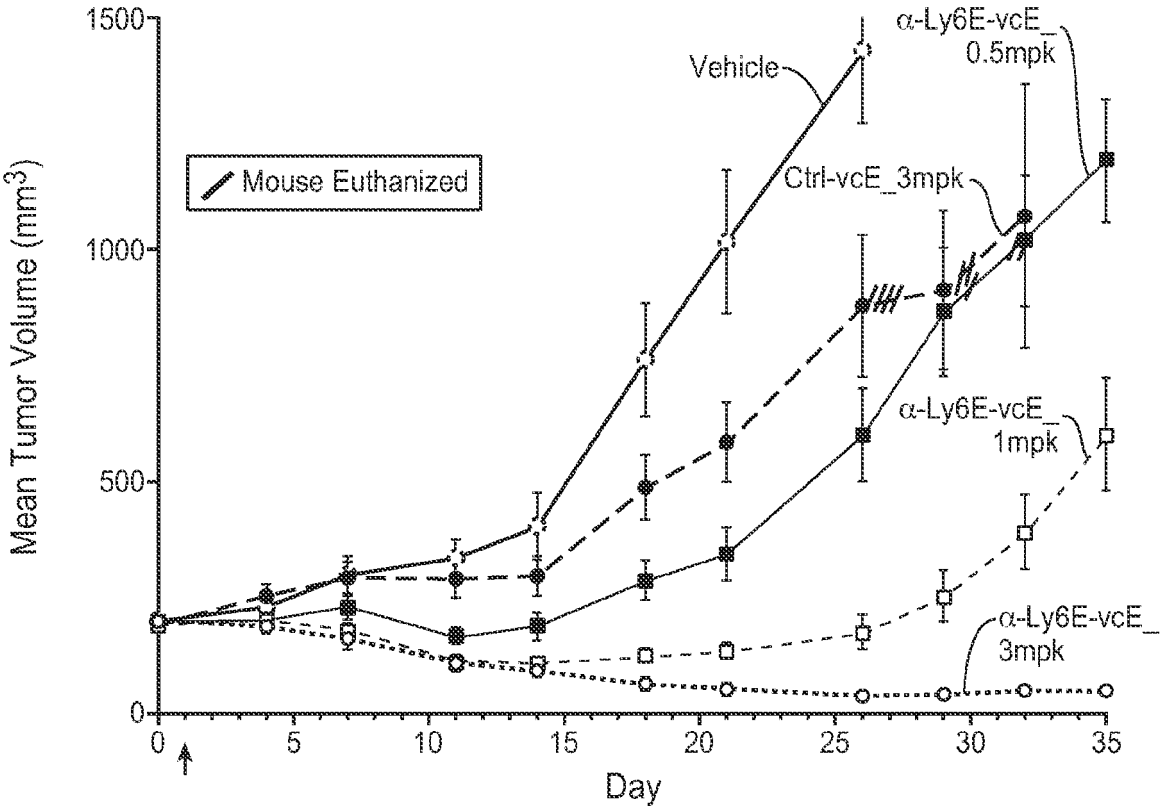

Mean Tumor Volume (mm3)
1500
1000
500
0
Mouse Euthanized
Vehicle
α-Ly6E-vcE_ 0.5mpk
Ctrl-vcE_3mpk
α-Ly6E-vcE_ 1mpk
α-Ly6E-vcE_ 3mpk
0
5
10
15
20
25
30
35
Day

FIG. 8A

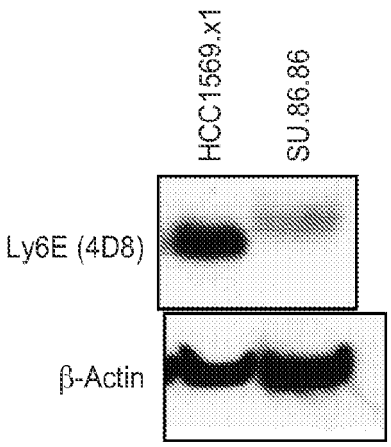


FIG. 8B

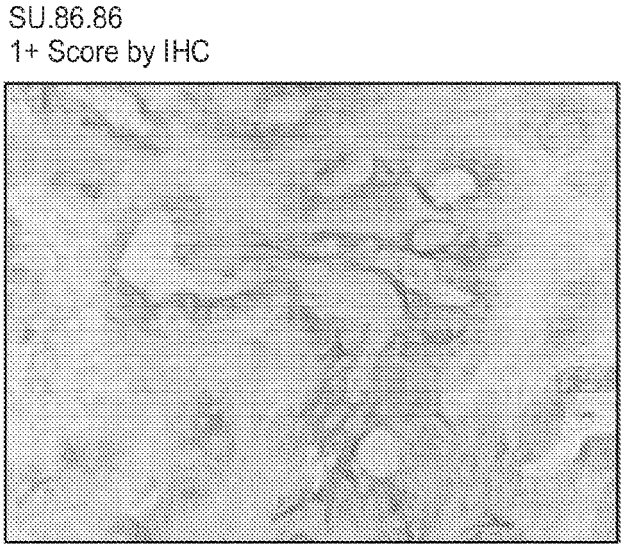


FIG. 8D

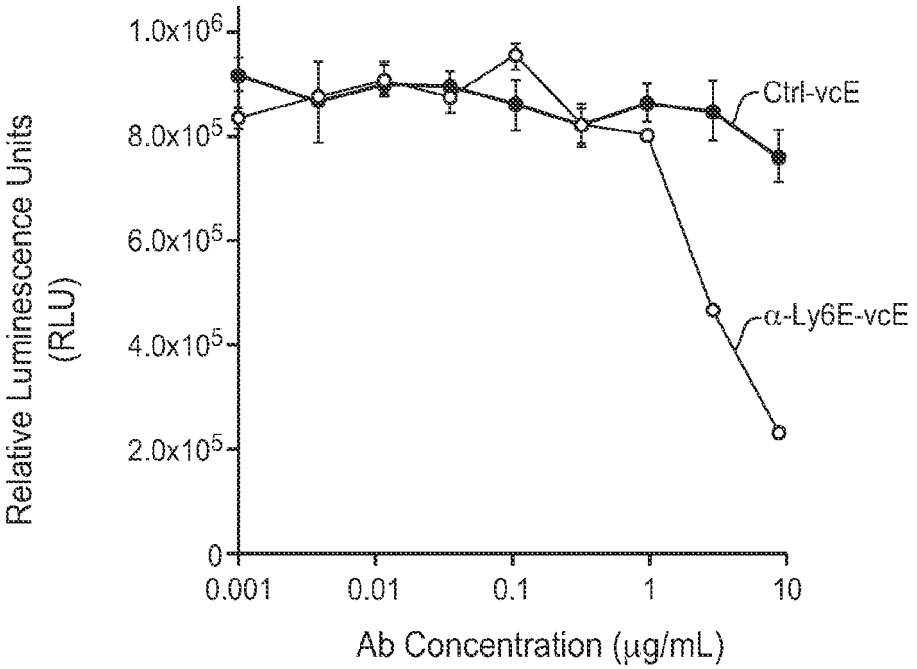


FIG. 8C

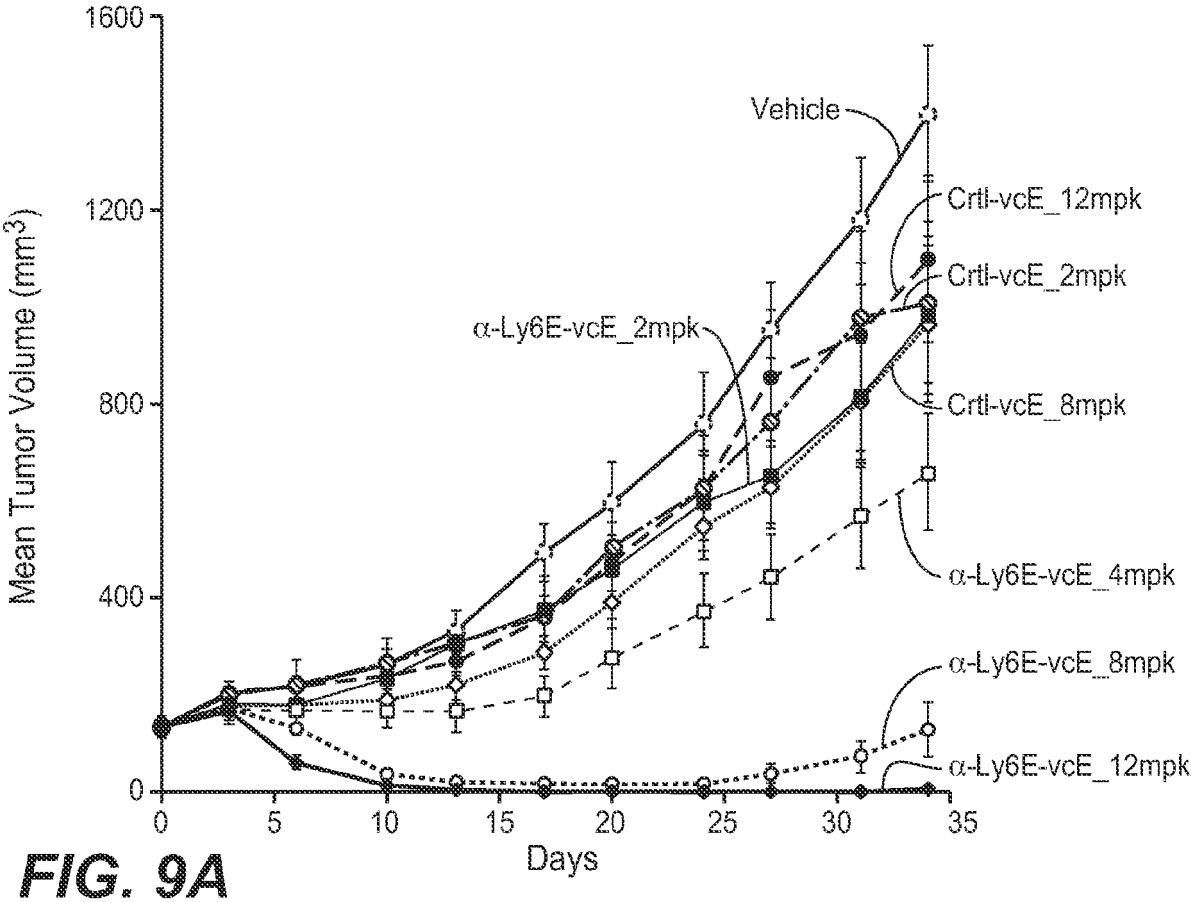


FIG. 9A

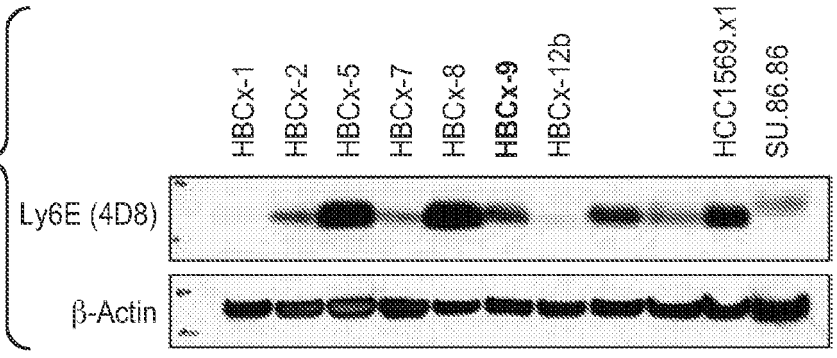


FIG. 9B

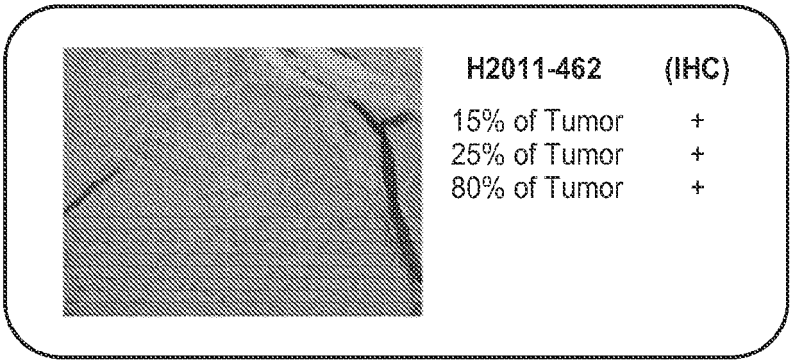


FIG. 9C

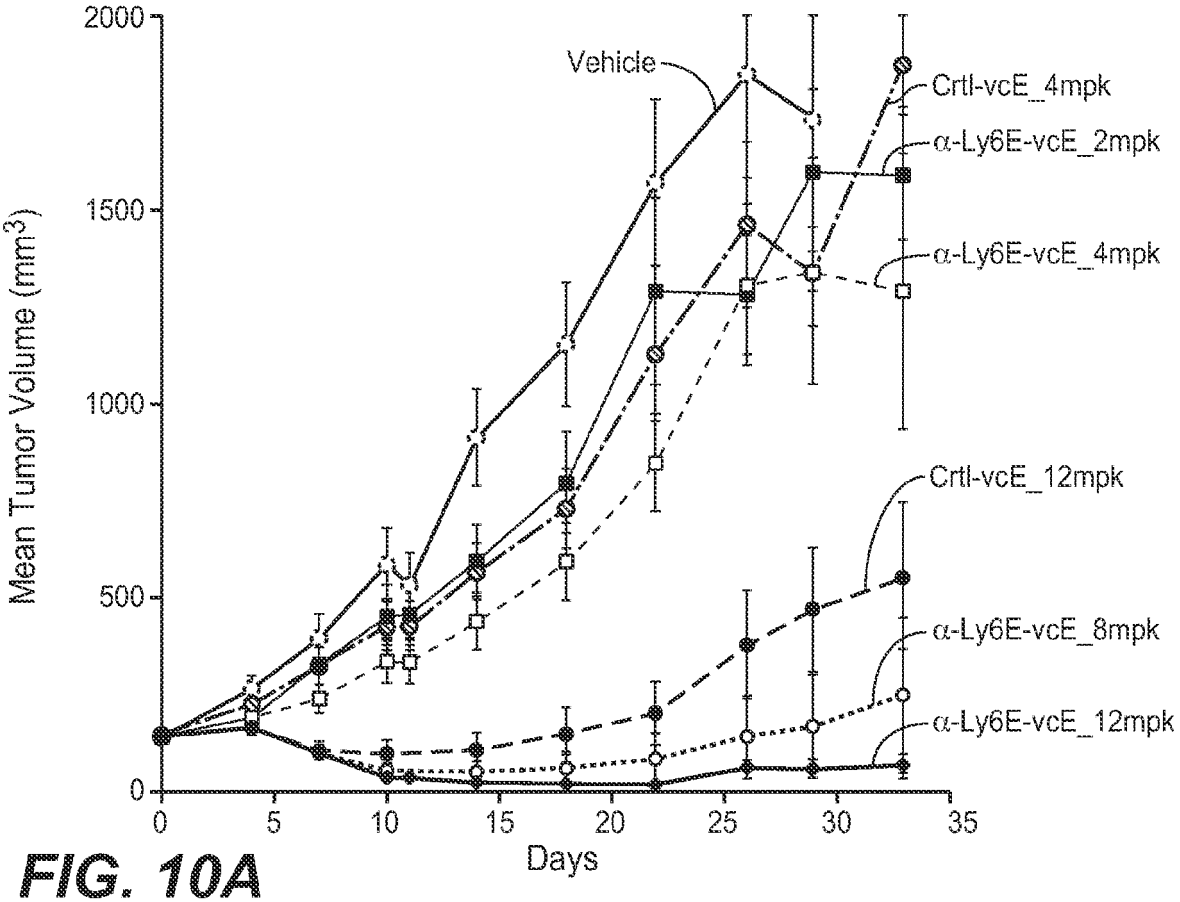


FIG. 10A

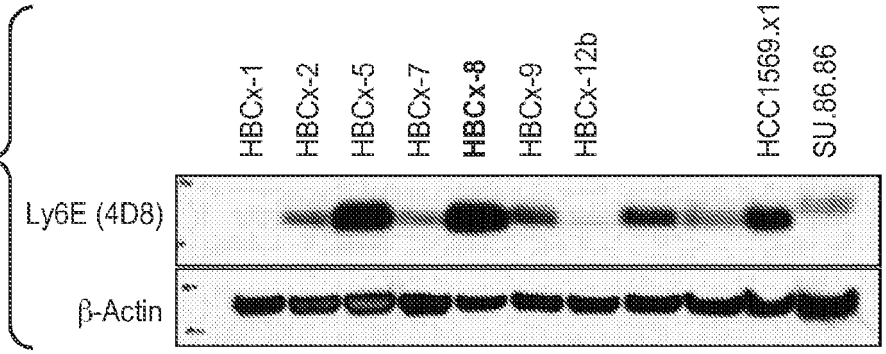


FIG. 10B

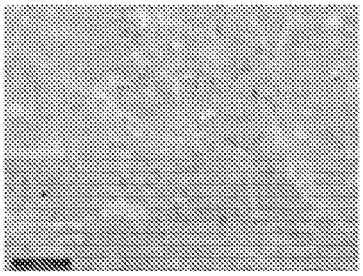


FIG. 10C

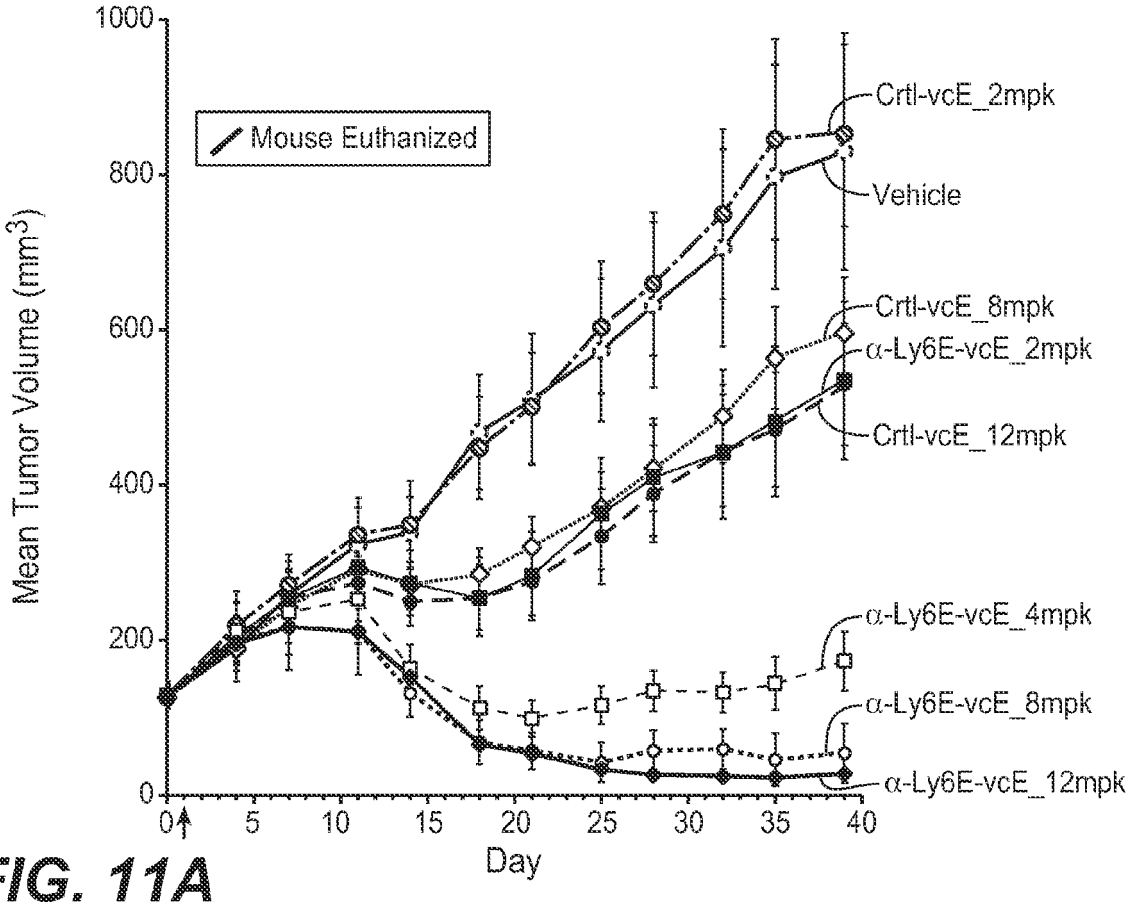


FIG. 11A

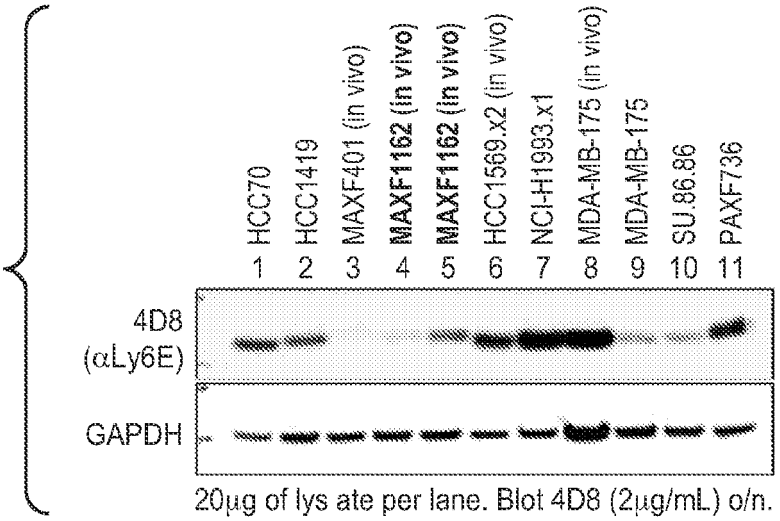


FIG. 11B

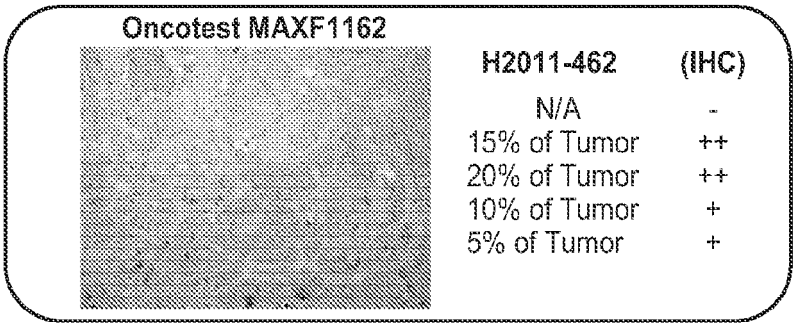


FIG. 11C

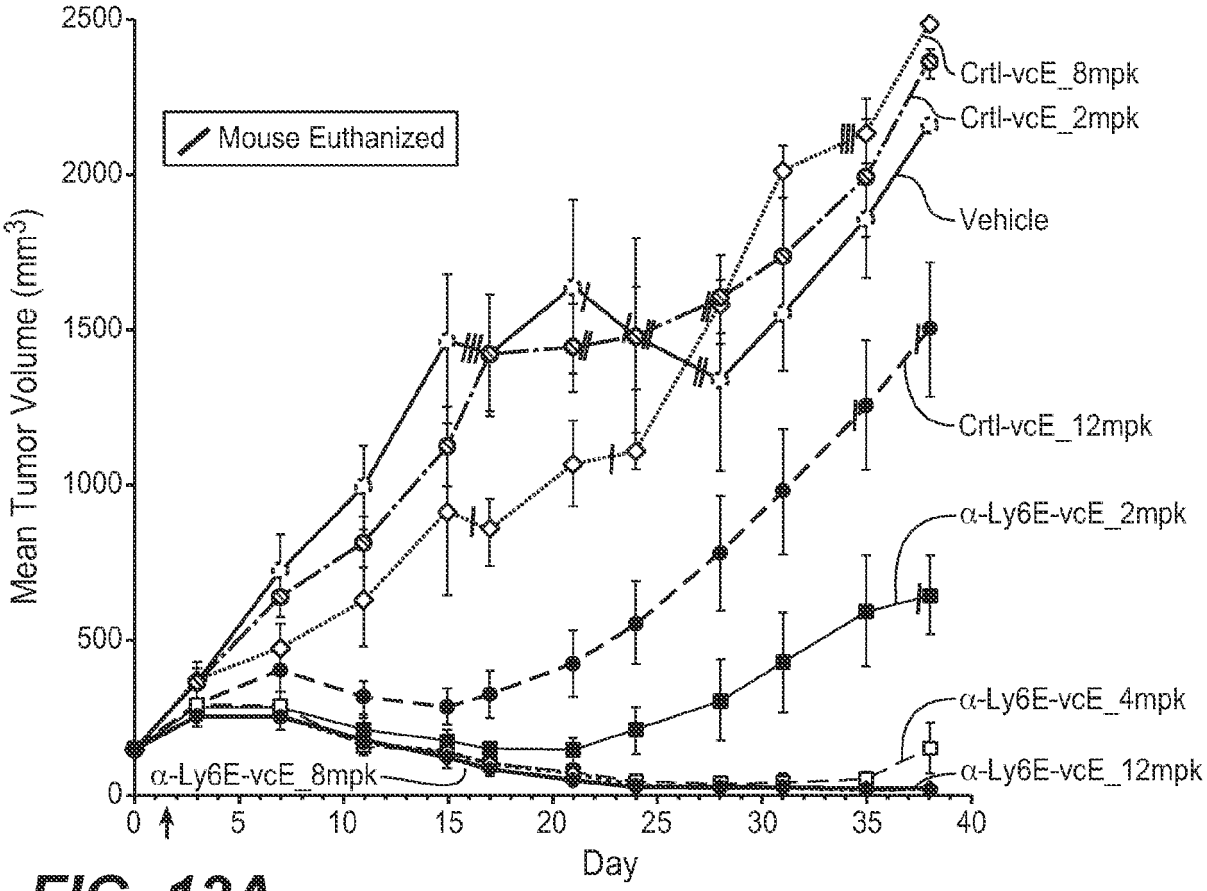


FIG. 12A

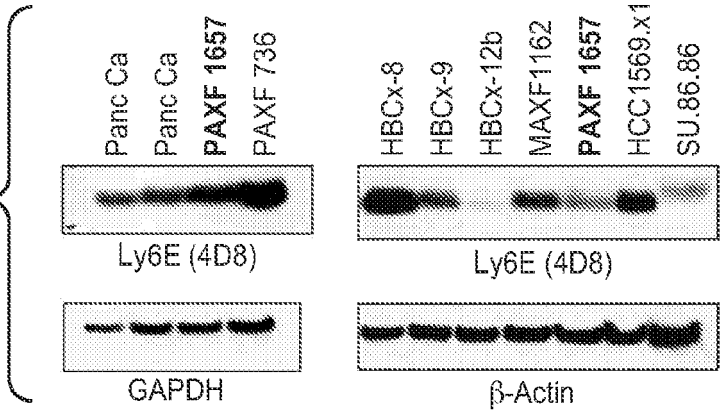
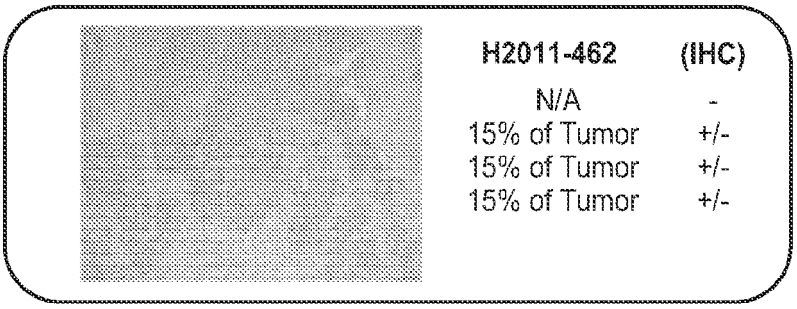


FIG. 12B



H2011-462	(IHC)
N/A	-
15% of Tumor	+/-
15% of Tumor	+/-
15% of Tumor	+/-

FIG. 12C

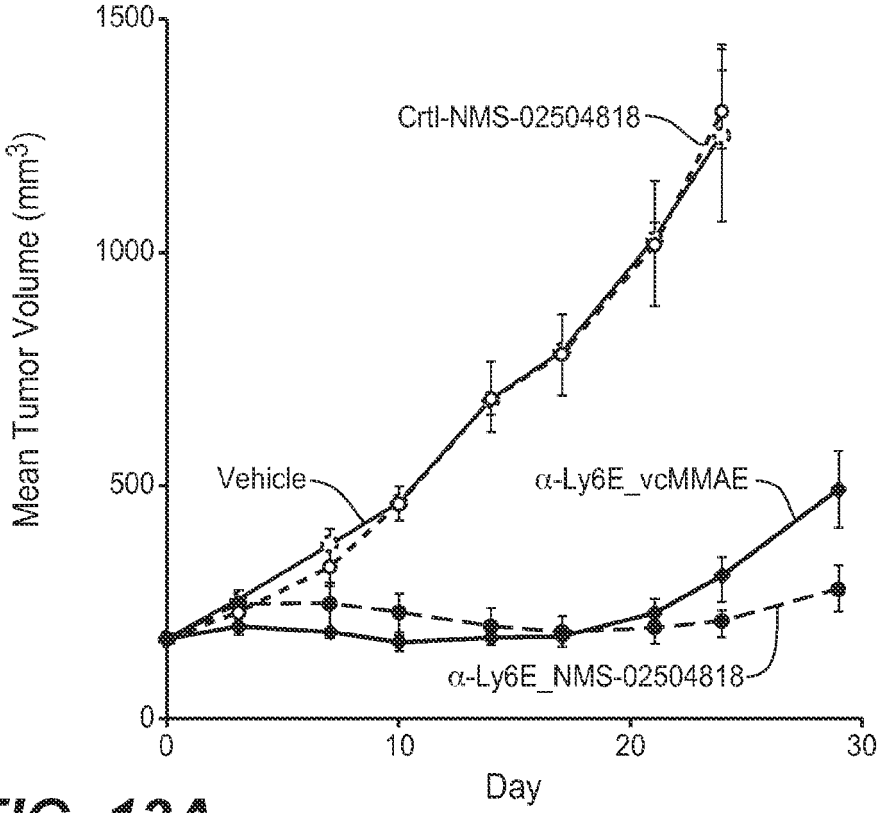


FIG. 13A

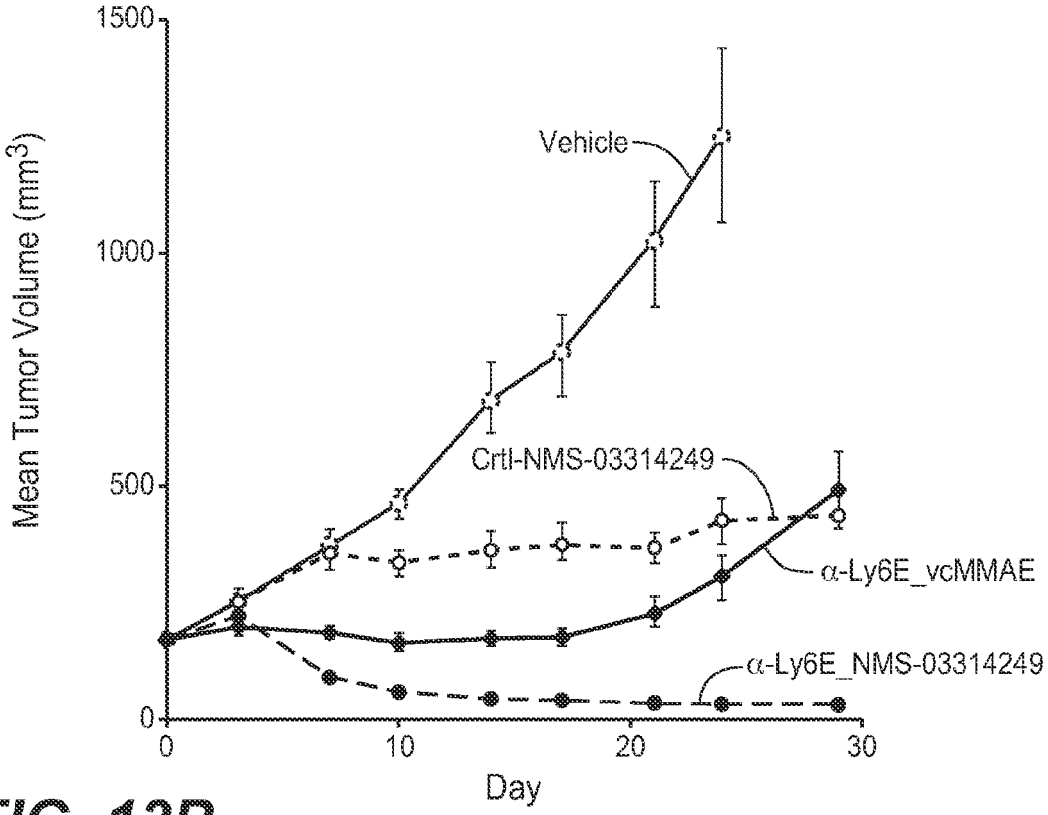


FIG. 13B

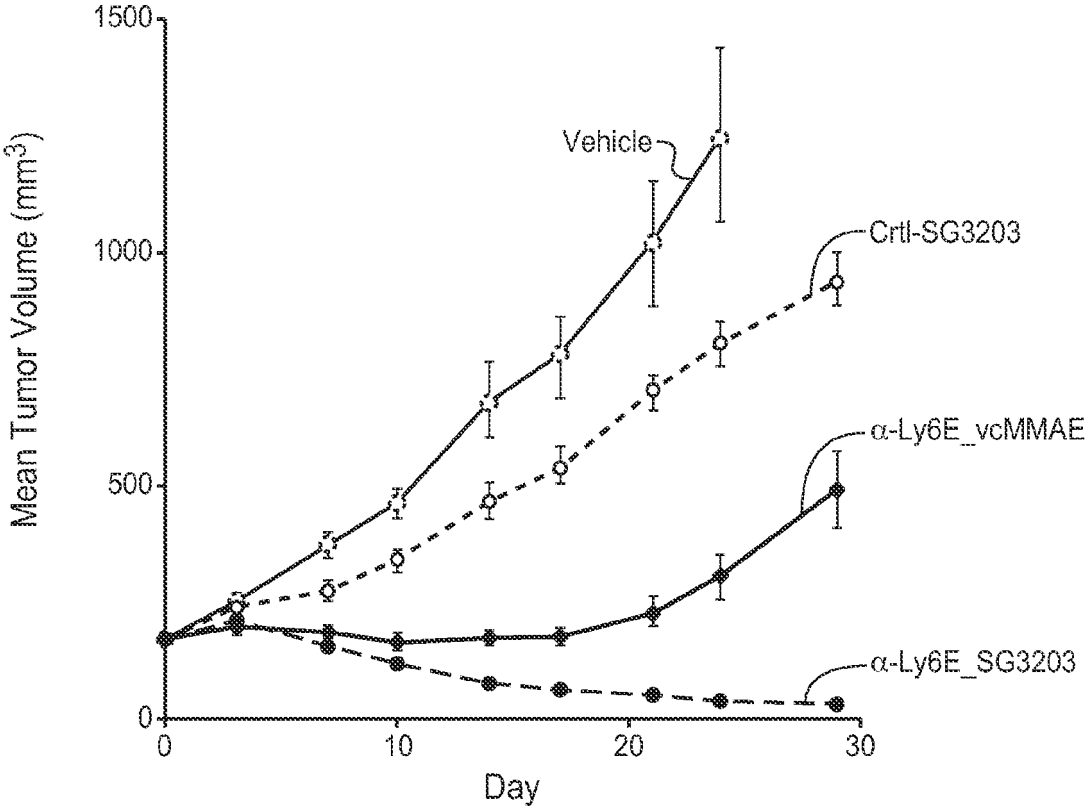


FIG. 13C

SU.86.86
1+ Score by IHC



FIG. 13D