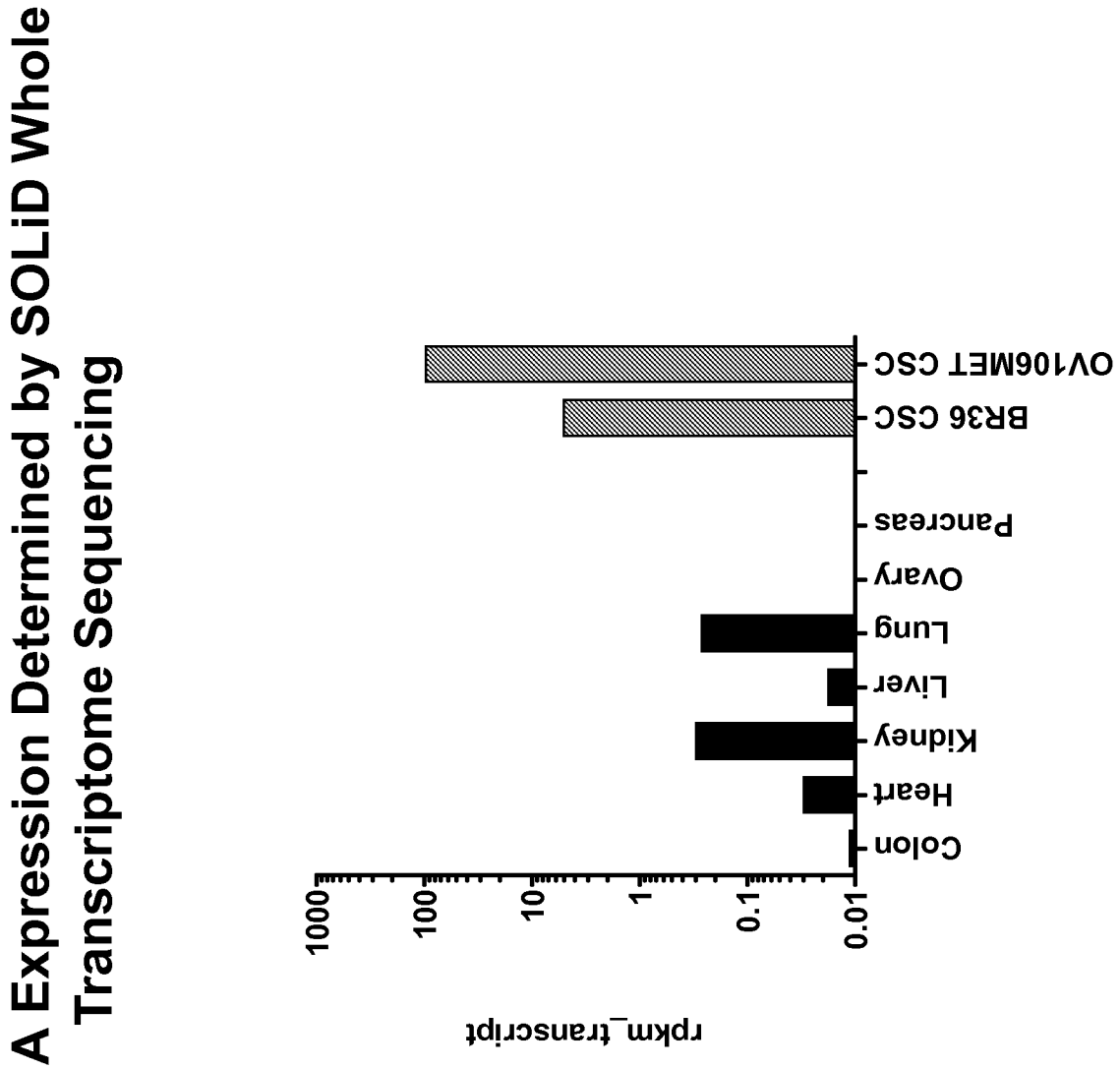

DPEP3 mRNA Expression Determined by SOLiD Whole Transcriptome Sequencing
rpkm_transcript
1000
100
10
1
0.1
0.01
Colon
Heart
Kidney
Liver
Lung
Ovary
Pancreas
BR36 CSC
OV106MET CSC

FIG. 1A

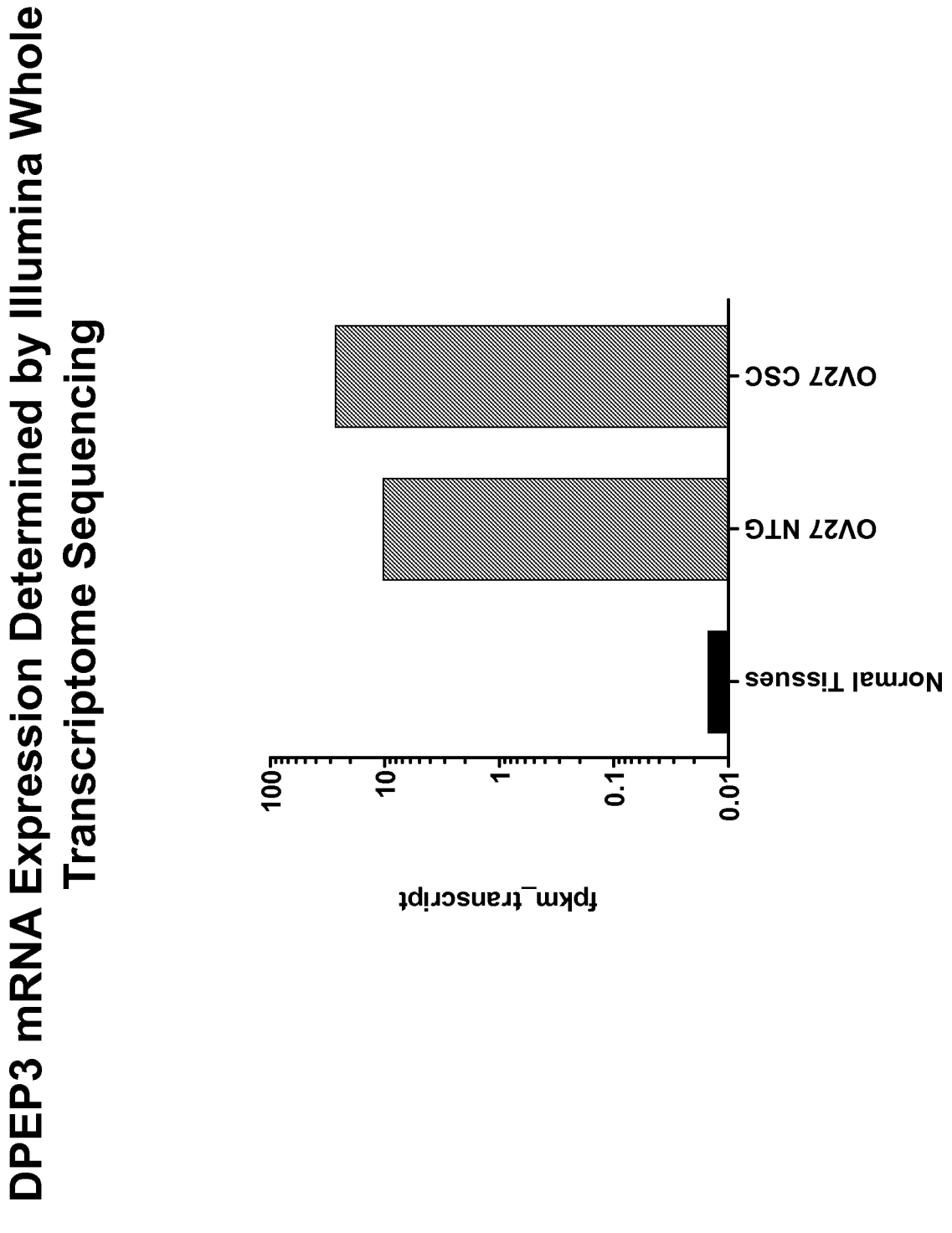

DPEP3 mRNA Expression Determined by Illumina Whole Transcriptome Sequencing
fpkm_transcript
100
10
1
0.1
0.01
Normal Tissues
OV27 NTG
OV27 CSC

FIG. 1B

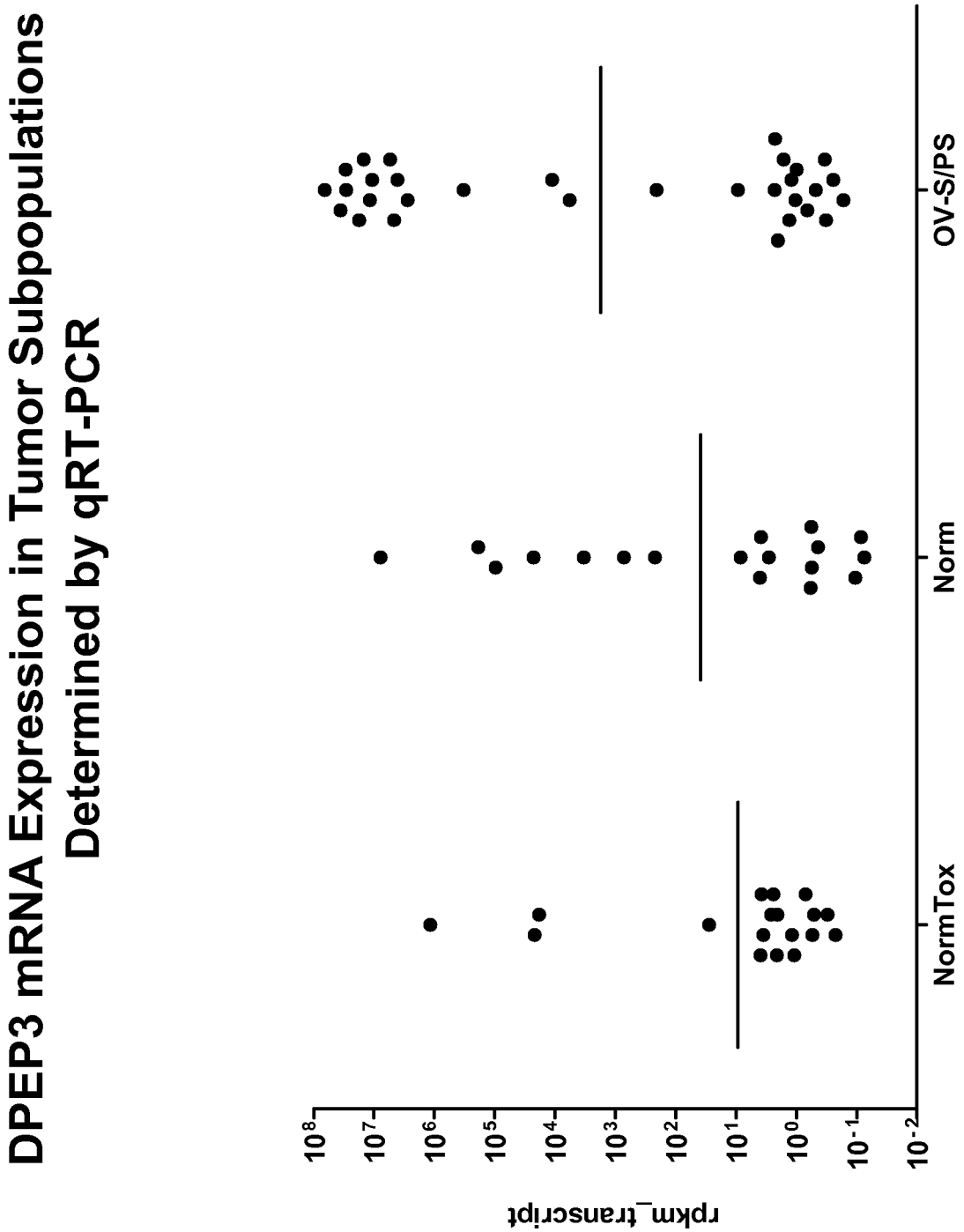

DPEP3 mRNA Expression in Tumor Subpopulations
Determined by qRT-PCR
rpkm_transcript
10^{8}
10^{7}
10^{6}
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
NormTox
Norm
OV-S/PS

FIG. 2A

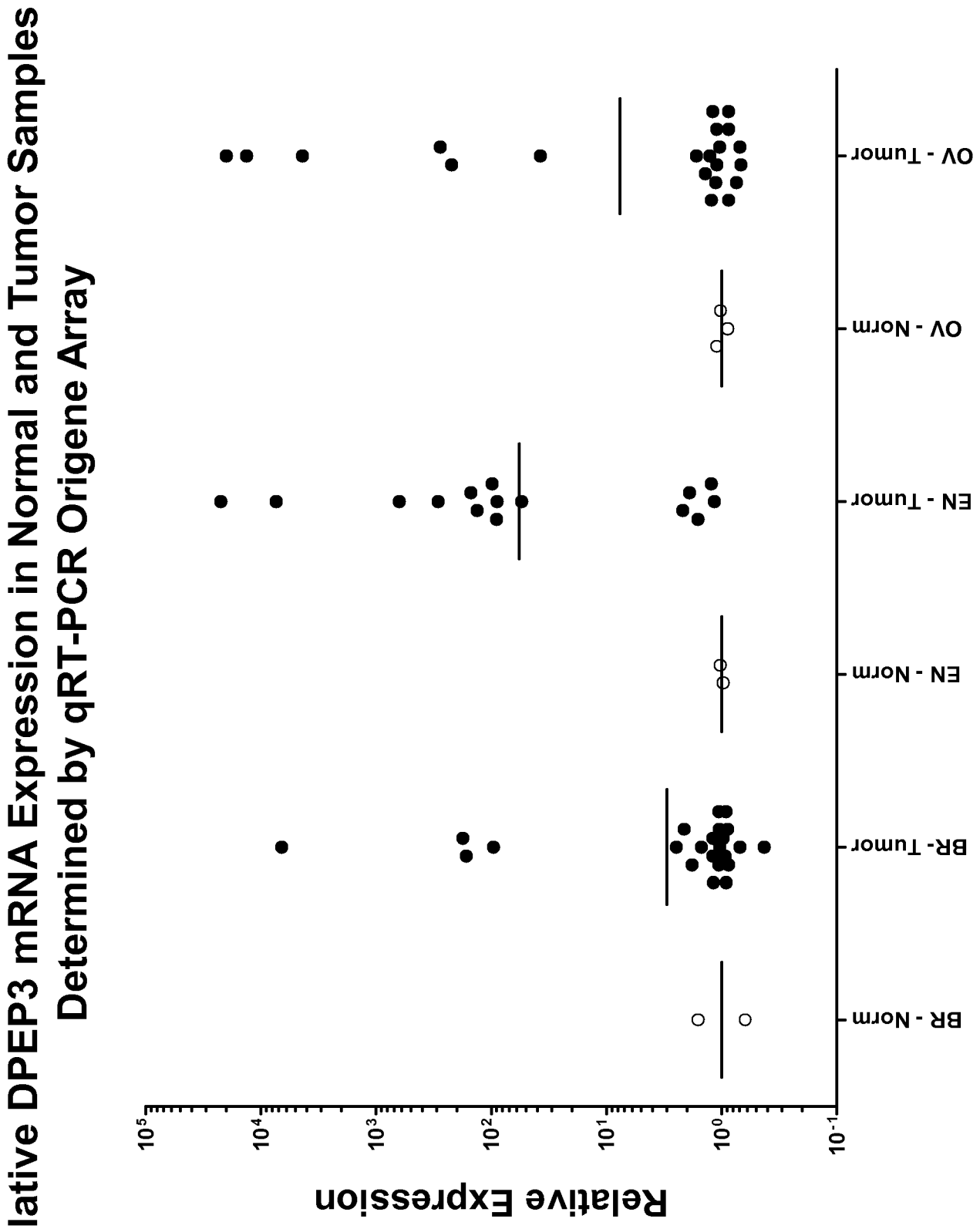

Relative DPEP3 mRNA Expression in Normal and Tumor Samples
Determined by qRT-PCR Origene Array
Relative Expression
10^5
10^4
10^3
10^2
10^1
10^0
10^{-1}
BR - Norm
BR- Tumor
EN - Norm
EN - Tumor
OV - Norm
OV - Tumor

FIG. 2B

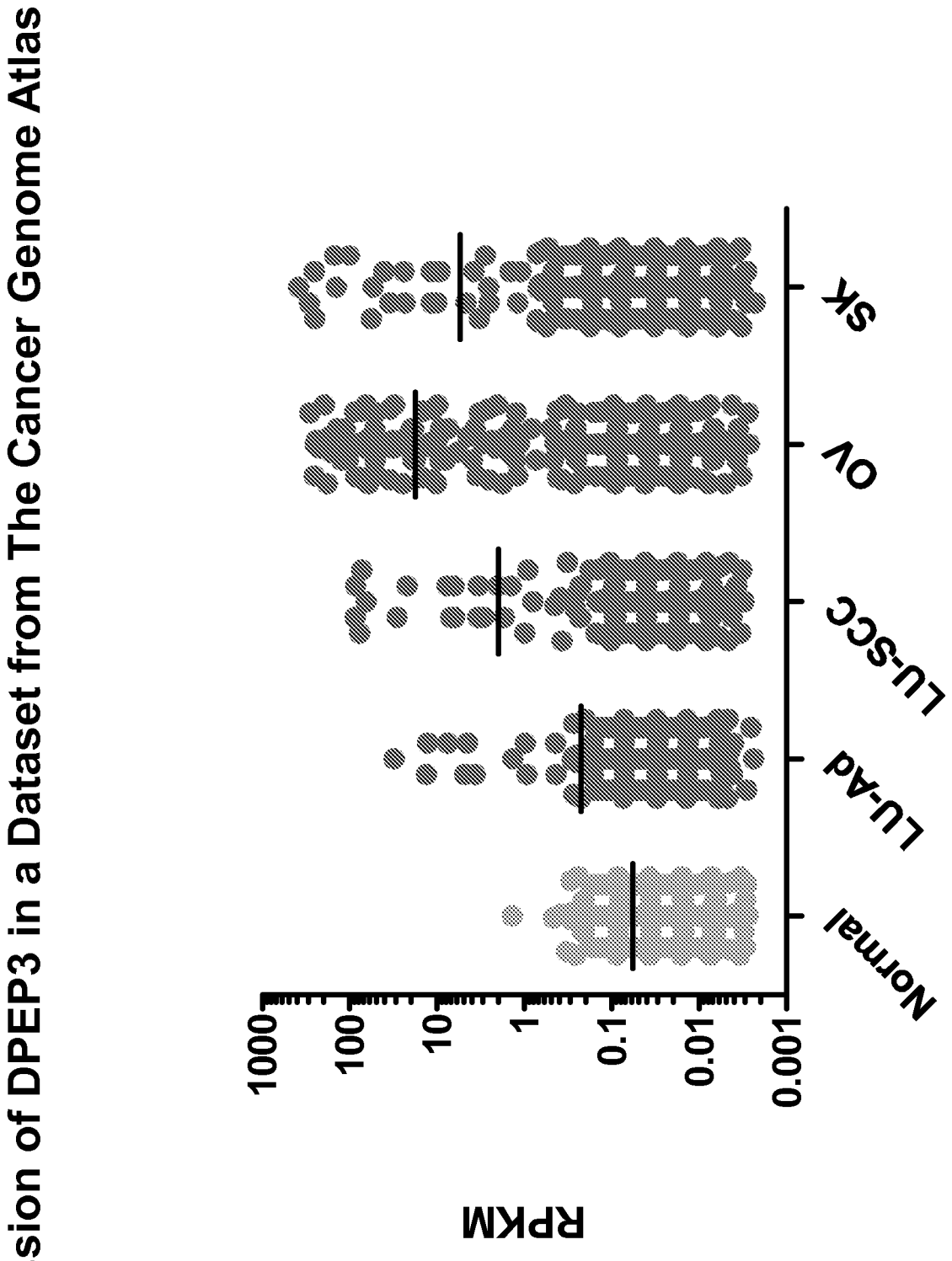

Expression of DPEP3 in a Dataset from The Cancer Genome Atlas
RPKM
1000
100
10
1
0.1
0.01
0.001
Normal
LU-AD
LU-SCC
OV
SK

FIG. 3

Anti-DPEP3 Murine Antibody Characteristics

Antibody	Isotype	Affinity (KD)	BIN	cDPEP3 Cross Reactive	rDPEP3 Cross Reactive	mDPEP3 Cross Reactive	hDPEP2 Cross Reactive
SC34.2	IgG2b/k	+++	B	YES	NO	NO	YES
SC34.3	IgG2a/k	++	U	YES	NO	NO	NO
SC34.4	IgG2b/k	++	B	YES	YES	NO	NO
SC34.5	IgG1/k	+++	A	NO	NO	NO	NO
SC34.6	IgG1/k	+++	A	NO	NO	NO	NO
SC34.7	IgG1/k	++	A	YES	NO	NO	NO
SC34.8	IgG2a/k	+++	A	NO	NO	NO	NO
SC34.9	IgG1/k	+	ND	NO	NO	NO	NO
SC34.10	IgG1/k	++	C	NO	NO	NO	YES
SC34.11	IgG2a/k	++	A	NO	NO	NO	YES
SC34.13	IgG2a/k	++	A	YES	NO	NO	NO
SC34.14	IgG1/k	+++	A	NO	NO	NO	YES
SC34.15	IgG1/k	++	A	NO	NO	NO	NO
SC34.16	IgG1/k	+++	A	YES	NO	NO	NO
SC34.18	IgG2b/k	+++	B	NO	NO	NO	NO
SC34.19	IgG1/k	++	A	YES	NO	NO	NO
SC34.20	IgG1/k	++	A	YES	NO	NO	NO
SC34.21	IgG1/k	+++	A	NO	NO	NO	NO
SC34.22	IgG2a/k	++	A	NO	NO	NO	NO
SC34.24	IgG1/k	+++	A	YES	NO	NO	NO

FIG. 4

Anti-DPEP3 Murine Antibody Characteristics

Antibody	Isotype	Affinity (KD)	BIN	cDPEP3 Cross Reactive	rDPEP3 Cross Reactive	mDPEP3 Cross Reactive	hDPEP2 Cross Reactive
SC34.25	IgG1/k	+++	C	YES	NO	NO	NO
SC34.26	IgG2b/k	+	A	NO	NO	NO	NO
SC34.27	IgG1/k	+++	A	YES	NO	NO	NO
SC34.28	IgG1/k	++	A	NO	NO	NO	NO
SC34.29	IgG2b/k	+++	U	YES	NO	NO	NO
SC34.32	IgG1/k	++	A	NO	NO	NO	NO
SC34.33	IgG1/k	++	A	NO	NO	NO	NO
SC34.34	IgG1/k	++	A	YES	NO	NO	NO
SC34.35	IgG1/k	++	A	NO	NO	NO	NO
SC34.36	IgG2a/k	ND	ND	YES	NO	NO	NO
SC34.37	IgG1/k	+	ND	NO	NO	NO	NO
SC34.38	IgG2b/k	+++	A/B	NO	NO	NO	NO
SC34.39	IgG2a/k	+++	A	NO	NO	NO	NO
SC34.40	IgG2a/k	++	A	NO	NO	NO	NO
SC34.41	IgG1/k	+	A	NO	NO	NO	NO
SC34.43	IgG1/k	+++	C	YES	NO	NO	NO
SC34.44	IgG1/k	+++	A	NO	NO	NO	NO
SC34.45	IgG1/k	+++	C	NO	NO	NO	NO
SC34.46	IgG1/k	+++	A	YES	YES	YES	YES
SC34.47	IgG2a/k	+++	U	NO	NO	NO	NO
SC34.48	IgG1/k	+++	A	NO	NO	NO	YES
SC34.49	IgG1/k	+	A	NO	NO	NO	NO

FIG. 4 cont.

Anti-DPEP3 Murine Antibody Characteristics

Antibody	Isotype	Affinity (KD)	BIN	cDPEP3 Cross Reactive	rDPEP3 Cross Reactive	mDPEP3 Cross Reactive	hDPEP2 Cross Reactive
SC34.50	IgG2b/k	+	A/B	NO	NO	NO	NO
SC34.51	IgG1/k	+	ND	NO	NO	NO	NO
SC34.52	IgG2b/k	++	A/B	YES	NO	YES	YES
SC34.53	IgG2b/k	++	B	NO	NO	NO	NO
SC34.54	IgG2b/k	+++	A	YES	NO	NO	NO
SC34.55	IgG1/k	+++	ND	NO	NO	NO	NO
SC34.56	IgG1/k	ND	A	YES	NO	NO	NO
SC34.58	IgG1/k	+++	A	YES	NO	NO	NO
SC34.59	IgG1/k	+++	A	NO	NO	NO	NO
SC34.60	IgG2b/k	ND	ND	NO	NO	NO	NO
SC34.61	IgG1/k	+	A	NO	NO	NO	NO
SC34.62	IgG2b/k	ND	ND	YES	YES	YES	YES
SC34.63	IgG1/k	+++	A	YES	NO	NO	NO
SC34.65	IgG2a/k	+++	A	NO	NO	NO	NO
SC34.66	IgG2a/k	+++	A	NO	NO	NO	NO
SC34.67	IgG2a/k	+++	ND	YES	NO	NO	NO
SC34.68	IgG2a/k	+++	A	NO	NO	NO	NO
SC34.69	IgG1/k	+	ND	YES	NO	NO	NO
SC34.70	IgG2b/k	+	ND	YES	YES	YES	YES
SC34.71	IgG2a/k	+++	U	NO	NO	NO	NO
SC34.72	IgG2a/k	+++	U	YES	NO	NO	NO

FIG. 4 cont.

Anti-DPEP3 Murine Antibody Characteristics

Antibody	Isotype	Affinity (KD)	BIN	cDPEP3 Cross Reactive	rDPEP3 Cross Reactive	mDPEP3 Cross Reactive	hDPEP2 Cross Reactive
SC34.73	IgG1/k	+++	A	NO	NO	NO	YES
SC34.74	IgG1/k	+	A	YES	NO	NO	NO
SC34.75	IgG1/k	++	A	YES	NO	NO	NO
SC34.76	IgG1/k	+++	C	YES	NO	NO	NO
SC34.77	IgG1/k	++	C	NO	NO	NO	NO
SC34.78	IgG1/k	+	ND	NO	NO	NO	NO
SC34.80	IgG2a/k	++	A	YES	NO	NO	NO
SC34.81	IgG1/k	+++	A	NO	NO	NO	NO
SC34.83	IgG2a/k	+	A	YES	YES	YES	NO
SC34.84	IgG1/k	+++	A	YES	NO	NO	NO
SC34.85	IgG1/k	+++	A	NO	NO	NO	NO
SC34.86	IgG1/k	+++	A	YES	NO	NO	NO
SC34.87	IgG2a/k	++	U	NO	YES	NO	NO
SC34.88	IgG1/k	+	A	NO	NO	NO	NO
SC34.89	IgG1/k	+++	A	YES	NO	NO	NO
SC34.90	IgG2a/k	++	A	NO	NO	NO	NO
SC34.91	IgG1/k	+++	A	YES	NO	NO	NO
SC34.92	IgG1/k	+	A	NO	NO	NO	NO
SC34.94	IgG2a/k	++	D	NO	NO	NO	NO
SC34.95	IgG1/k	+++	A	YES	YES	NO	NO
SC34.96	IgG1/k	+++	ND	YES	NO	NO	NO

FIG. 4 cont.

Anti-DPEP3 Murine Antibody Light Chain Variable Region Amino Acid Sequences

Name	FR1	CDRL1	FR2	CDRL2	FR3	CDRL3	FR4	SEQ ID NO
SC34.2	DIQMTQTASSLSASLGDRVTISC	SASQGITNYLN	WYQQKPDGTVKLLIY	YTSRLHS	GVPSRFSGSGSGTDYSLTISNLEPEDIATYYC	QQYSKLPWT	FGGGTKLEIK	21
SC34.4	DIVMSQSPSSLTVSVGEKVTMSC	KSSQSLLYSRNQKNYLA	WYQQKPGQSPKLLIY	WASTRDS	GVPDRFTGTGSGTDFSLTISSVKTEDLAVYYC	HQHYRYPLT	FGAGTKLELK	25
SC34.5	DIVMTQFPSSLAMSVGQKVTMNC	KSSQSLLNSSNQKNYLA	WFQQKPGQSPKLLVY	FASTRES	GVPDRFLGSGSGTDFTLTISSVQAEDLADYFC	QQHYSTPFT	FGSGTKLEIK	29
SC34.6	DIVMTQSPSSLAVSVGQNITMNC	KSSQSLLYNQKNYLA	WYQQKPGQSPKLLVY	FASTRES	GVPDRFVGSGSGTDFTLTISNVQAEDLADYFC	QQHYTTPFT	FGSGTKLEIK	33
SC34.7	DIVMSQSPSSLAVSVGEKVTMSC	KSSQSLLYSRYQKNYLA	WYQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFTLTISSVKAEDLAVYYC	HQYYRYPLT	FGAGTKLELK	37
SC34.11	DIVMSQSPSSLAVSAGEKVTMSC	KSSQSLLNSRTRKNYLA	WYQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFTLTISSVQAEDLAVYYC	KESYNLWT	FGGGTKLEIK	41
SC34.13	DIVMSQSPSSLAVSVGEKVTLSC	KSSQSLLYSRYQKNYLA	WYQQKPGQSPRLVIY	WASTRES	GVPDRFTGSGSGTDFTLTISSVKAEDLVVYYC	QQYYRYPLT	FGSGTKLELK	45
SC34.14	DIQMTQAPASLSPSVGATVTITC	RTSEHIYSYLA	WYQQKQGKSPRLLVY	NAKTLAE	GVSSRFSGSGSGTQFSLQINSLQPEDFGNYYC	QHHYDTPYT	FGGGTKLEIK	49
SC34.16	DIVMSQSPSSLAVSVGEKVTMSC	KSSQSLLYSRYQKNYLA	WYQQKPGQSPKLLIY	WSSTRES	GVPDRFTGSGSGTDFTLTISSVKAEDLADYYC	QQYYRYPLT	FGAGTKLELK	53
SC34.18	DIVMTQSQKFMSTSVGDRVSITC	KASQNVRTAVG	WYQQKPGQSPKTLIY	LASNRHT	GVSDRFTGSGSGTDFTLTISNVQSEDLADYFC	LQHWNYPWT	FGGGTKLEIK	57
SC34.19	DIVMSQSPSALAVSVGEKITMSC	KCSQSLLHSRDQKNYLA	WYQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFTLTINTVKAEDLAVYYC	QQHYRYPLT	FGAGTKLELK	61
SC34.20	DIVMSQSPSSLTVSVGEKVTMSC	KSSQSLLYSTYQKNYLA	WFQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFTLTISSVKAEDLAVYYC	QQYYRYPLT	FGAGTKLELK	65
SC34.23	QIVLTQSPAIMSASLGEEITLTC	SASSSVSYMH	WYQQKSGTSPKLLIY	STSNLAS	GVPSRFSGSGSGTFYSLTINTVEAEDAADYYC	HQWSSWT	FGGGTKLEIK	69
SC34.24	DIVMSQSPSSLAVSVGEKVTMNC	KSSQSLLYSRYQKNYLA	WYQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFTLTISSVKAEDLAVYYC	QQYYRYPLT	FGAGTKLELK	73
SC34.25	DIVMSQSPSSLAVSGGEKVTMSC	KSSQSLLYSRYQKNYVA	WYQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFTLTISSVKAEDLAVYYC	QQYYRYPLT	FGAGTKLELK	77

FIG. 5A

Anti-DPEP3 Murine Antibody Light Chain Variable Region Amino Acid Sequences

Name	FR1	CDRL1	FR2	CDRL2	FR3	CDRL3	FR4	SEQ ID NO
SC34.26	DVVLTQTPLTLSVTIGQPASISC	KSSQSLLYSNRRTYLN	WLLQRPGQSPKRLIY	LVSKLDS	GVPDRFTGSGSGTDFTLKISRVEAEDLGVYYC	VQGTHFPYT	FGTGTKLELK	81
SC34.27	DIVMSQSPSSLAVSVGEKVTMSC	KSSQSLLYSRNQKNYLA	WYQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFTLTINSVKAEDLAVYYC	HQYYRYPLT	FGAGTKLELK	85
SC34.28	QIVLTQSPAIMSASLGERVTMTC	TASSSVNSFYLH	WYQQKPGSSPKLWIH	STSNLAS	GVPGRFSGSGSGTSYSLTISSMEAEDAATYYC	HQYHRSPYT	FGGGTKLEIK	89
SC34.33	QIVLTQSPAIMSASLGERVTMTC	TASSSVNSFYLH	WYQQKPGSSPKLWIH	STSNLAS	GVPGRFSGSGSGTSYSLTISSMEAEDAATYYC	HQYHRSPYT	FGGGTKLEIK	93
SC34.36	DIQMTQTTSSLSASLGDRVTISC	RASQDISNYLN	WYQQKPDGTVKLLIY	YTSRLHS	GVPSRFSGSGSGTDYSLTISNLEQEDIATYFC	QQGNTLPWT	FGGGTKLEIK	97
SC34.38	DVVLTQTPLTLSVTIGQPASISC	KSSQSLLYSNRRTYLN	WLLQRPGQSPKRLIY	LVSKLDS	GVPDRFTGSGSGTDFTLKISRVEAEDLGVYYC	VQGTHFPFT	FGTGTKLELK	101
SC34.39	QIVLTQSPAIMSASQGERVTMTC	TASSSVSSNYLH	WYQQKPGSSPKLWIY	STSHLAS	GVPVRFSGSGSGTSYSLTISSMEAEDAATYYC	HQYHRSPYT	FGGGTKLEIK	105
SC34.40	DIQMTQSPASLSASVGETVTMTC	RASENIYSNLA	WYQQKQGKSPQVLVY	AATNLAD	GVPSRFSGSESGTQFSLKINSLQPEDFGSYYC	QHFYGTPWT	FGGGTKLEIK	109
SC34.41	DIQMIQSPSSMFASLGDRVSLSC	RASQGIRGNLD	WYQQKPGGTIKLLIY	STSNLNS	GVPSRFSGSGSGSDYSLTISSLESEDFADYYC	LQRDAYPYT	FGGGTKLEIK	113
SC34.46	DIVMSQSPSSLAVSVGEKVTMSC	KSSQSLLYSKYQKNFLA	WYQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFTLTISNVKAEDLAVYYC	QQYYRYPLT	FGAGTTLELK	117
SC34.48	DIQMTQAPASLSASVGETVTITC	RTSGHIYSYLA	WYQQKQGKSPQLLVY	NAKTLAE	GVSSRFSGSGSGTQFSLKITSLQPEDFGDYYC	QHHYDTPYT	FGGGTKLEIK	121
SC34.49	DIQMTQSSSYLSVSLGGRVTITC	KASEHINNWLA	WYQQKPGNPPRLLIS	GATSLET	GVPSRFSGSGSGKDYTLSITGLQTEDIATYFC	QQYRSTPFT	FGSGTKLEIK	125
SC34.50	DIQMTQSSSSFSVSLGDRVTITC	KASEDIYNRLA	WYQQKPGNAPRLLIS	GATSLET	GVPSRFSGSGSGKDYTLSITSLQTEDVATYYC	QQYWSTIFT	FGSGTKLEIK	129
SC34.53	DVVLTQTPLTLSVTIGQPASISC	KSSQSLLYSNRRTYLN	WLLQRPGQSPKRLIY	LVSKLDS	GVPDRFTGSGSGTDFTLKITRVEAEDLGVYYC	VQGTHFPYT	FGTGTKLEIK	133

FIG. 5A Cont.

Anti-DPEP3 Murine Antibody Light Chain Variable Region Amino Acid Sequences

Name	FR1	CDRL1	FR2	CDRL2	FR3	CDRL3	FR4	SEQ ID NO
SC34.58	DIVMSQSPSSLAVSVGEKVTMSC	KSSQSLLYSRNQKNYLA	WYQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFTLTISSVKAEDLAVYYC	HQHYRYPLT	FGAGTKLELR	137
SC34.63	DIVMSQSPSSLAVSVGEKVTMSC	KSSQSLLYSKYQKNYLA	WYQQKPGQSPKLLIY	WASTRES	GVPDRFTGSESGTDFTLTISSVKAEDLAVYYC	QQYYRYPLT	VGAGTKLELK	141
SC34.67	DMVMSQSPSSLAVSVGEKVALSC	KSSQSLLHSRDQKNYLA	WYQQKPGQSPKLLIH	WASTRES	GVPARFTGSGSGTDFTLTISSVKAEDLAVYYC	QQSYRYPLT	FGAGTKLELK	145
SC34.71	DIVMTQSQKFMSTSVGDRVSITC	KASQNVRTAVA	WYQQKPGQSPKTLIY	LASNRHT	GVPDRFTGSGSGTDFTLTISYVQSEDLADYFC	LQHLNYPWT	FGGGTKLEIK	149
SC34.76	DIVMSQSPSSLAVSVGERVTMNC	KSSQSLFYSRYQKNYLA	WYQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFTLTISSVKAEDLAVYYC	QQYYRYPLT	FGAGTKLELK	153
SC34.78	DIMMTQSPATLSVTPGDRVSLSC	RASQSIGAYLH	WYQQKSHESPRLLIK	YVSQSIS	GIPSRFSGSGSGSDFTLSINSVEPEDVGVYYC	QNGHSFPLT	FGAGTKLELK	157
SC34.83	QIVLIQSPAIMSASPGENVTMTC	SASSSVSYMH	WYQQKSGTSPKRWIY	DTSKLAS	GVPARFSGSGSGTSYSLTISSMEAEDAATYYC	QQWNSYPPT	FGAGTKLELK	161
SC34.86	DTVMSQSPSSLAVSVGEKVTLSC	KSSQSLLYSRYQKNYLA	WYQQKPGQSPKLLLY	WASTRES	GVPDRFTGSGSGTDFTLTISSVKAEDLAVYYC	QQHYRYPLT	FGAGTKLELK	165
SC34.87	DIVMSQSPSSLAVSAGEKVTMSC	KSSQSLLNSRTRKNYLA	WYQQKPGQSPKLLIY	WASTRES	GVPGRFTGSGSGTDFTLTISSVQAEDLAVYYC	KQSYNLWT	FGGGTKLEIK	169
SC34.89	DIVMSQSPSSLGVSVGEKVTLSC	KSSQSLFNKRDQKNYLA	WYQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFILTIRSVKAEDLAVYYC	HQSYRYPLT	FGAGTKLELK	173
SC34.90	QIVLTQSPAIMSASQGERVTMTC	TASSSVSSSYLH	WYQQKPGSSPKLWIY	STSNLAS	GVPVRFSGSGSGTSYSLTISSMEAEDAATYYC	HQYHRSPYT	FGGGTKLEIK	177
SC34.91	DIVMSQSPSSLAVSVGEKVTMSC	KSSQSLLYSTYQKNYLA	WFQQKPGQSPKLLIY	WASTRES	GVPDRFTGSGSGTDFTLTISSVKAEDLAVYYC	QQYYRYPLT	FGAGTKLELK	181
SC34.95	DIVLSQSPSSLAVSVGEKVTMSC	KSSQSLLNSRDRKNYLA	WCQQKPGQSPKVMIY	WASTRES	GVPDRFTGSGSGTDFTLTISSVKAEDLAVYYC	QQYYSYPLT	VGAGTKLELK	185

FIG. 5A Cont.

Anti-DPEP3 Humanized Antibody Light Chain Variable Region Amino Acid Sequences

Name	FR1	CDRL1	FR2	CDRL2	FR3	CDRL3	FR4	SEQ ID NO
hSC34.2	DIQMTQSPSSLSASVGDRVTITC	SASQGITNYLN	WYQQKPGKAPKLLIY	YTSRLHS	GVPSRFSGSGSGTDFTLTISSLQPEDFATYYC	QQYSKLPWT	FGQGTKVEIK	189
hSC34.11	DIQMTQSPSSLSASVGDRVTITC	KSSQSLLNSRTRKNYLA	WYQQKPGKVPKLLIY	WASTRES	GVPSRFSGSGSGTDFTLTISSLQPEDVATYYC	KESYNLWT	FGGGTKVEIK	193
hSC34.14	DIQMTQSPSSLSASVGDRVTITC	RTSEHIYSYLA	WYQQKPGKAPKLLIY	NAKTLAE	GVPSRFSGSGSGTDFTLTISSLQPEDFATYYC	QHHYDTPYT	FGQGTKLEIK	197
hSC34.25	DIVMTQSPDSLAVSLGERATINC	KSSQSLLYSRYQKNYVA	WYQQKPGQPPKLLIY	WASTRES	GVPDRFSGSGSGTDFTLTISSLQAEDVAVYYC	QQYYRYPLT	FGQGTKLEIK	201
hSC34.28	EIVLTQSPATLSLSPGERATLSC	TASSSVNSFYLH	WYQQKPGLAPRLLIY	STSNLAS	GIPDRFSGSGSGTDFTLTISRLEPEDFAVYYC	HQYHRSPYT	FGQGTKLEIK	205
hSC34.38	DVVMTQSPLSLPVTLGQPASISC	KSSQSLLYSNRRTYLN	WFQQRPGQSPRRLIY	LVSKLDS	GVPDRFSGSGSGTDFTLKISRVEAEDVGVYYC	VQGTHFPFT	FGQGTKLEIK	209
hSC34.87	DIVMTQSPDSLAVSLGERATINC	KSSQSLLNSRTRKNYLA	WYQQKPGQPPKLLIY	WASTRES	GVPDRFSGSGSGTDFTLTISSLQAEDVAVYYC	KQSYNLWT	FGGGTKLEIK	213

FIG. 5A Cont.

Anti-DPEP3 Murine Antibody Heavy Chain Variable Region Amino Acid Sequences

Name	FR1	CDRH1	FR2	CDRH2	FR3	CDRH3	FR4	SEQ ID NO
SC34.2	QIQLQQSGPELVKPGASVKISCKASGYTFT	DYYIN	WLKQRPGQGLEWIG	WTYPGSGPTKYNGKFRG	KATLTVDTSSSTVYMQLSSLTSEDSAVYFCAR	RGIYYYDGIYPNYFDY	WGQGTTLTVSS	23
SC34.4	QVQLQQSGAELARPGASVKLSCKASGYTFT	SYGIN	WVKQRTGQGLEWIG	EIYPGSGNIYYNEKFKG	KAILTTDKSSNTAYMQLSSLTSEDSAVYFCAR	VHDYGSWFPY	WAQGTLVTVSA	27
SC34.5	EVQLQQSGPELVKPGASMKISCKASGYSFT	GYTMN	WVKQSHGKNLEWIG	LIYPYNDDTRYKQKFKG	KATLTVDKSSSTAYMELLSLTSEDSAVYYCTR	GYYGSPYFDV	WGAGTTVTVSS	31
SC34.6	EVQLQQSGPELVKPGTSMKISCKASGYSFT	GYTMN	WVKQSHGKNLEWIG	LIYPYNDDTRYNRKFKG	KATLTVDKSSNTAYMELLSLTSVDSAVCYCAR	GSYGSPFFDV	WGAGTTVTVSS	35
SC34.7	QVQVQQSGAELARPGASVKLSCKASGYTFT	SYGIN	WVKQRTGQGLEWIG	EIYPGSGNAYYNEKFKV	KAKLTTDNSSRTAYMQLINLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	39
SC34.11	QVQLQQSGAELAKPGASVKMSCKASGYTFT	NYWMI	WVKQRPGQGLEWIG	YIDPTTDYTAYNQKFKD	KATVTADKSSSTAYMQLNSLTSEDSAVYYCAR	GGNVALDF	WGQGTSVTVSS	43
SC34.13	QVQVQQSGAELARPGASVKLSCKASGYTFT	SYAIS	WVKQRTGQGLEWIG	EIYPGSGNTYYNGKFKG	KATLTTDKSSSTAYMQLSSLTSEDSAVYFCAR	VDDYGSWFPY	WGQGTLVTVSA	47
SC34.14	EVQLQQSGPEMVKPGASVKISCKASGYIFT	DYYMH	WVKQSHGESLDWIG	RVNPKKGGTTYNQKFEG	KAILTVDKSSSTAYMDLNSLTSEDSAVYYCAM	GIYYSYDASFDY	WGQGTTLTVSS	51
SC34.16	QVQLQQSGTELARPGASVKLSCKASEYTFT	SYAIT	WVRQRTGQGLEWIG	EIYPGSGNTYYNETFKG	KATLTSDKSSSTASMQLSSLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	55
SC34.18	QVSLKESGPGILQPSQTLSLTCSFSGFSLS	TSGMGVG	WIRQPSGKGLEWLA	NIWWDDSIYYNTALKS	RLTISKDTSKNQVFLKIASVDTADTATYSCAR	IESYYGNRAWFAY	WGQGTLVTVSA	59
SC34.19	QVQLQQSGAELARPGASVKLSCKASGYTFT	SYAIT	WVKQRTGQGLEWIG	EIYPGSGNTFFNEKFKG	RATLTTDKSSSTAYMQLSSLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	63
SC34.20	QVQLQQSGSELARPGASVKLSCKASGYTFR	SYAIS	WVRQRTGQGLEWIG	EIYPESGNTDYNAQFKG	KATLTTDKSSSTAYMQLSSLTSEASAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	67
SC34.23	EVQLQESGPSLVKPSQTLSLTCSVTGDSIT	SGSWN	WIRKFPGNKLEYMG	YINYSGGTYYNPSLKS	RISITRDTSKNHYYLQLNSVTTEDTATYYCGR	RLGSGGWFGY	WGQGTLVTVSA	71
SC34.24	QVQLQQSGPELARPGASVKLSCKASEYTFT	SYAIT	WVKQRAGQGLEWIG	EIYPGSGDTYYNEKFKG	KATLTTDKSSSTAYMQLSSLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	75
SC34.25	QVQLQQSGVELARPGASVKVSCKASGYTFT	SYAIS	WVKQRTGQGLEWIG	EIYPGSGETYYNEKFKG	KATLTTDKSSSTAYMHLSSLTSEDSAVYLCGR	VNDYGSWFPY	WGQGTLVTVSA	79

FIG. 5B

Anti-DPEP3 Murine Antibody Heavy Chain Variable Region Amino Acid Sequences

Name	FR1	CDRH1	FR2	CDRH2	FR3	CDRH3	FR4	SEQ ID NO
SC34.26	QVQLQQPGAELVKPGASVTLSCKASGYTFT	SYYIY	WVKQRPGEGLEWIG	EINPSNGGPNFNERFKN	KATLTVDKSSSTAYMQLSSLTSEDSAVYYCTR	GLLYYDYDRGFAY	WGQGTLVTVSA	83
SC34.27	QVQLQQSGAELARPGASVKLSCKASGYTFR	SYGIN	WVKQRTGQGLEWIG	EIYPGRGDVYYNENFKG	KATLTTDKSSSTAYMQLSSLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	87
SC34.28	QVQLQQSGAELMKPGASVKISCKATGYTFS	SYWIE	WVKQRPGHGLEWIG	EILPGSGNTYYNERFKD	KATFTADTSSNTAYMQLSSLTSEDSAVYYCAR	RAAAYYSNPEWFAY	WGQGTLVTVSA	91
SC34.33	QVQLQQSGAELMKPGASVKISCKATGYTFS	SYWIE	WVKQRPGHGLEWIG	EILPGSDKTYYNERFKD	KATFTADTSSNTAYMQLSSLTSEDSAVYYCTR	RAAAYYSNPEWFAY	WGQGTLVTVSA	95
SC34.36	QVQLQQPGSVLVRPGASVKLSCKASGYTFT	SYWMH	WVKQRPGQGLEWIG	EISPTSGRPNYNAKFKG	KATLTVDTSSSTAYVDLSSLTSEDSAVYYCAK	GEGYYGKAFDY	WGQGTTLTVSS	99
SC34.38	QVQLQQPGAELVKPGASVTLSCKASGYTFT	SYYMY	WVKQRPGEGLEWIG	EINPSNGGANFNERFKN	KATLTVDKSSSTAYMQLSSLTSEDSAVFYCTR	GLLYYDYDRGFAY	WGQGTLVTVSA	103
SC34.39	QVQLQQSGAELMKPGASVKISCKATGYTFS	NYWIE	WVKQRPGHGLEWIG	EILPGSDSTYFNEKFKG	KATFTADTSSNTAYMQLSSLTSEDSAVYYCTI	RSAAYYSNPEWFAY	WGQGTLVTVSA	107
SC34.40	EVQLQESGPGLAKPSQTLSLTCSVTGYSIT	SDYWN	WIRKFPGNKLEYMG	YITYSGSTYYNPSLKS	RISITRDTSKNQYYLQLNSVTTEDTATYYCAR	ARVYYYDGRYGRAMDY	WGQGTSVTVSS	111
SC34.41	EVKLVESGGGLVKPGGSLKLSCAASGFTFT	SYTMS	WVRQTPAKRLEWVA	TISTGGGNTYYPDIVKG	RFTISRDNARSTLYLQMSSLRSEDSAMYYCAR	RFYDGSYNYWYFDV	WGAGTTVTVSS	115
SC34.46	QVQLQQSGTELARPGTSVKLSCKASGYTFR	SYAIS	WVRQRTGQGLEWIG	EIYPGSDKTYYNESLKG	KVTLTTDKCSSTANMQLTSLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	119
SC34.48	EVQLQQSGLEMVKPGASVKISCKASGYIFT	DYYMH	WVKQSHGKSLDWIG	RVNPKKGGTTYNQKFEG	KATLTVDKSSSTAYMDLNSLTSEDSAVYYCAM	GIYFSYDASFDY	WGQGTTLTVSS	123
SC34.49	EVQLQQSGPELVKPGSSVKISCKASGYTFT	DYHMN	WVKQSHGKSLEWIG	NINPYYGVSTYNQNLKG	TATLTVDKSSSTAYMELRGLTSEDSAVYYCVR	RAMDSPRFAY	WGQGTLVTVSA	127
SC34.50	QVQLQQPGAELVRPGASVKLSCKASGYTFT	SYWIN	WVKQRPGQGLEWIG	NIFPSDSYTNYNQKFRD	KATLTVDKSSSTAYMQLSSPTSEDSAVYYCTI	RTYGNYFDY	WGQGTTLTVSS	131
SC34.53	QVQLQQPGAELVKPGASVTLSCKASGYTFT	SYYIY	WVKQRPGEGLEWIG	EIDPSNGGPNFNDRFKN	KATLTVDKSSSTAYMQLSSLTSEDSAVYYCTR	GLLYYDYDRGFAY	WGQGTLVTVSA	135

FIG. 5B Cont.

Anti-DPEP3 Murine Antibody Heavy Chain Variable Region Amino Acid Sequences

Name	FR1	CDRH1	FR2	CDRH2	FR3	CDRH3	FR4	SEQ ID NO
SC34.58	QVQLQQSGAELARPGASVKLSCKASGYTFT	SYGVN	WVKQRTGQGLEWIG	EIYPGRGDVYYNDNFKG	KATLTTDKSSSTAYMQLSSLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	139
SC34.63	QVQLQQSGVELARPGASVKLSCKASGYTFT	SYGID	WVKQRTGQGLEWIG	ETYPGRGDTYYNENFKG	KATLTTDKSSSTAFLQLSSLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	143
SC34.67	QVQLQQSGAELARPGASVRLSCKASGYTFT	SYGIN	WVKQRTGQGLEWIG	EIYPGSGDSYYNKTFKG	KAILTTDKSSSTAYMQLSSLTPEDSAVYFCAR	VHDYGSWFPY	WGPGALVTVSA	147
SC34.71	QVSLKESGPGILQPSQTLSLTCSFFGFSLS	TSSMGVG	WIRQPSGKGLEWLA	NIWWDNNKYYNAALKS	RLTISKDTSKNQVFLNIASVDTTDTATYYCAR	IESYYSNRAWFPY	WGRGTLVTVSA	151
SC34.76	QVQLQQSGAELARPGASVKLSCKTSEYTFT	SYAIN	WVKQRTGQGLEWIG	EVYPGSGNTYYNEKFKG	KAILTTDKSSSTGYMQLSNLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	155
SC34.78	DVQLQESGRGLVKPSQSLSLTCTVTGYSLT	SDFAWN	WIRQFPGNKLEWMG	YIRYSGTTSYNPSLKS	RISITRDTSKNQFFLQLNSVTTEDTATYYCGY	GNYGYAMDY	WGQGTSVTVSS	159
SC34.83	QVQLQQSGAELVKPGASVKISCKASGYAFS	HSWMN	WVKQRPGKGLEWIG	RIYPGDGDINYNGKFKG	KATLTADKSSSTAYMQLSSLTSEDSAVYFCAR	RGPSYNNYCFDY	WGQGTTLTVSS	163
SC34.86	QVQLQQSGAELARPGASVKLSCKASGYTFT	SYTIT	WVKQRTGQGLEWIG	EIYPGSGNTYYNEKFKG	KATLTTDKSSSTAYMQLSSLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	167
SC34.87	QVQLQQSGAELAKPGASVKMSCKASGYTFT	SYWML	WVKQRPGQGLEWIG	YIDPRNGYTEYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCTR	GGNVAMDY	WGQGTSVTVSS	171
SC34.89	QVQLQQSGAELARPGASVKLSCKASGYTFT	SYAIS	WVKQRTRQGLEWIG	EIYPGSGDIHYSGKFKG	KASLTTDKSSSTAYMQLSSLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	175
SC34.90	QVQLQQSGAELMKPGASVKISCKATGYTFS	YYWIE	WVKQRPGHGLEWIG	EILPGSDTTYYNEKFKG	KATFTADTSSNTAYMQLSSLTSEDSAVYYCTI	RRAAYYSNPEWFAY	WGQGTLVTVSA	179
SC34.91	QVQLQQSGAELARPGASVKLSCKASGYTFR	SYAIS	WVKQRTGQGLEWIG	EIYPGSGDTYYNENFKG	KATLTTDKSSSTAYMQLSSLTSEDSAVYFCAR	VHDNGSWFPY	WGQGTLVTVSA	183
SC34.95	QVQVKQSGAELARPGASVKLSCKASGYTFT	SYAIN	WLKQRTGQGLEWIG	EIYPGSGNTYYNESFKN	KATLTTDKSSTTAYMQLNSLTSEDSAVYFCAR	VHDYGSWFPY	WGQGTLVTVSA	187

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FIG. 5B Cont.

Anti-DPEP3 Humanized Antibody Heavy Chain Variable Region Amino Acid Sequences

Name	FR1	CDRH1	FR2	CDRH2	FR3	CDRH3	FR4	SEQ ID NO
hSC34.2	EVQLVQSGAEVKKPGESLKISCKGSGYSFT	DYYIN	WVRQMPGKGLEWMG	WTYPGSGPTKYNGKFRG	QVTISADKSISTAYLQWSSLKASDTAMYYCAR	RGIYYYDGIYPNYFDY	WGQGTTVTVSS	191
hSC34.11	EVQLVQSGAEVKKPGESLKISCKGSGYSFT	NYWMI	WVRQMPGKGLEWMG	YIDPTTDYTAYNQKFKD	QVTISADKSISTAYLQWSSLKASDTAMYYCAR	GGNVALDF	WGQGTLVTVSS	195
hSC34.14	QVQLVQSGAEVKKPGASVKVSCKASGYTFT	DYYMH	WVRQAPGQRLEWMG	RVNPKKGGTTYNQKFEG	RVTITRDTSASTAYMELSSLRSEDTAVYYCAM	GIYYSYDASFDY	WGQGTTVTVSS	199
hSC34.25	QVQLVQSGAEVKKPGASVKVSCKASGYTFT	SYAIS	WVRQAPGQRLEWMG	EIYPGSGETYYNEKFKG	RVTITRDTSASTAYMELSSLRSEDTAVYYCAR	VNDYGSWFPY	WGQGTLVTVSS	203
hSC34.28	QVQLVQSGAEVKKPGSSVKVSCKASGGTFS	SYWIE	WVRQAPGQGLEWMG	EILPGSGNTYYNERFKD	RVTITADESTSTAYMELSSLRSEDTAVYYCAR	RAAAYYSNPEWFAY	WGQGTLVTVSS	207
hSC34.38	EVQLVQSGAEVKKPGESLKISCKGSGYSFT	SYYMY	WVRQMPGKGLEWMG	EINPSNGGANFNERFKN	QVTISADKSISTAYLQWSSLKASDTAMYYCTR	GLLYYDYDRGFAY	WGQGTLVTVSS	211
hSC34.87	QVQLVQSGAEVKKPGASVKVSCKASGYTFT	SYWML	WVRQAPGQRLEWMG	YIDPRNGYTEYNQKFKD	RVTITRDTSASTAYMELSSLRSEDTAVYYCAR	GGNVAMDY	WGQGTLVTVSS	215

FIG. 5B Cont.

Anti-DPEP3 Murine Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
SC34.2	Light Chain	GATATCCAGATGACACAGACTGCATCCTCCCTGTCTGCCTCTCTGGGAGACAGAGTCACCATCAGTTGCAGTGCAAGTCAGGGCATTACCAATTATTTAAACTGGTATCAGCAGAAACCAGATGG AACTGTTAAACTCCTGATCTATTACACATCACGTTTACACTCAGGAGTCCCATCAAGGTTCAGTGGCAGTGGGTCTGGGACAGATTATTCTCTCACCATCAGCAACCTGGAACCTGAAGATATTG CCACTTACTATTGTCAGCAGTATAGTAAACTTCCGTGGACGTTCGGTGGAGGCACCAAGCTGGAAATCAAA	20
SC34.2	Heavy Chain	CAGATCCAGCTGCAGCAGTCTGGACCTGAGCTGGTGAAGCCTGGGGCTTCAGTGAAGATATCCTGCAAGGCTTCTGGCTACACCTTCACTGACTACTATATAAATTGGTTGAAGCAGAGGCCTGG ACAGGGACTTGAGTGGATTGGATGGACTTATCCTGGAAGCGGTCCTACTAAGTACAATGGGAAGTTCAGGGGCAAGGCCACATTGACTGTAGACACATCCTCCAGCACAGTCTACATGCAGCTCA GCAGCCTGACCTCTGAGGACTCTGCGGTCTATTTCTGTGCAAGACGGGGGATTTATTACTACGATGGTATCTACCCAAATTACTTTGACTACTGGGGCCAAGGCACCACTCTCACAGTCTCCTCA	22
SC34.4	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTAACTGTGTCAGTTGGAGAGAAGGTTACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTCGCAATCAAAAGAACTACTTGGCCTGGTA CCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATTTACTGGGCATCCACTAGGGACTCTGGGGTCCCTGATCGCTTCACAGGCACTGGATCTGGGACAGATTTCTCTCTCACCATCAGCAGTG TGAAAACTGAAGACCTGGCAGTTTATTACTGTCACCAACATTATAGGTATCCGCTCACATTCGGTGCTGGGACCAAGCTGGAGCTGAAA	24
SC34.4	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAACTGGCGAGGCCAGGGGCCTCAGTGAAGCTGTCCTGTAAGGCTTCTGGATACACCTTCACAAGCTATGGTATAAACTGGGTGAAACAGAGAACTGG ACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGTGGAAATATTTACTACAATGAGAAGTTTAAGGGCAAGGCCATACTGACTACTGATAAATCCTCCAACACAGCCTACATGCAGCTCA GCAGCCTGACATCTGAAGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGCCCAAGGGACTCTGGTCACTGTCTCTGCA	26
SC34.5	Light Chain	GACATTGTGATGACACAGTTTCCATCCTCCCTGGCTATGTCAGTAGGACAGAAGGTCACTATGAACTGCAAGTCCAGTCAGAGCCTTTTAAATAGTAGTAATCAAAAGAACTATTTGGCCTGGTT CCAGCAGAAACCAGGACAGTCTCCTAAACTTCTGGTATACTTTGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCTTAGGCAGTGGATCTGGGACAGATTTCACTCTTACCATCAGCAGTG TGCAGGCTGAAGACCTGGCAGATTACTTCTGTCAGCAACATTATAGCACTCCATTCACGTTCGGCTCGGGGACAAAATTGGAAATAAAA	28
SC34.5	Heavy Chain	GAGGTCCAGCTGCAACAGTCTGGACCTGAGCTGGTGAAGCCTGGAGCTTCAATGAAGATATCCTGCAAGGCTTCTGGTTACTCATTCACTGGCTACACCATGAATTGGGTGAAGCAGAGCCATGG AAAGAACCTTGAGTGGATTGGACTTATTTATCCTTACAATGATGATACTAGGTACAAACAGAAGTTCAAGGGCAAGGCCACATTAACTGTAGACAAGTCATCCAGCACAGCCTACATGGAGCTCC TCAGTCTGACATCTGAGGACTCTGCAGTCTATTACTGTACAAGAGGGTACTACGGTAGTCCGTACTTCGATGTCTGGGGCGCAGGGACAACGGTCACCGTCTCCTCA	30
SC34.6	Light Chain	GACATTGTGATGACACAGTCTCCATCCTCCCTGGCTGTGTCAGTAGGACAGAATATCACTATGAACTGCAAGTCCAGTCAGAGCCTTTTATACAATCAAAAGAACTATTTGGCCTGGTACCAGCA GAAACCAGGACAGTCTCCTAAACTTCTGGTATACTTTGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCGTAGGCAGTGGATCTGGGACAGATTTCACTCTTACCATCAGCAATGTGCAGG CTGAAGACCTGGCAGATTACTTCTGTCAGCAACATTATACCACTCCATTCACGTTCGGCTCGGGGACAAAATTGGAAATTAAA	32
SC34.6	Heavy Chain	GAGGTCCAGCTGCAACAGTCTGGACCTGAGCTGGTGAAGCCTGGAACTTCAATGAAGATATCCTGCAAGGCTTCTGGTTACTCATTCACTGGCTACACCATGAATTGGGTGAAGCAGAGCCATGG AAAGAACCTTGAGTGGATTGGACTTATTTATCCTTACAATGATGATACTAGGTACAACCGGAAGTTCAAGGGCAAGGCCACATTAACTGTAGACAAGTCATCCAACACAGCCTACATGGAGCTCC TCAGTCTGACATCTGTGGACTCTGCAGTCTGTTACTGTGCAAGAGGGTCCTACGGTAGTCCATTCTTCGATGTCTGGGGCGCAGGGACAACGGTCACCGTCTCCTCA	34

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FIG. 5C

Anti-DPEP3 Murine Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
SC34.7	Light Chain	GACATTGTGATGTCTCAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGGTTACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTCGCTATCAAAAGAACTACCTGGCCTGGTACCAGCAGAAACCAGGACAGTCTCCTAAACTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTGTGAAGGCTGAAGACCTGGCAGTTTATTACTGTCACCAATATTATAGGTATCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAACTGAAA	36
SC34.7	Heavy Chain	CAGGTTCAGGTGCAGCAGTCTGGAGCTGAATTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGCAAGGCCTCTGGATACACCTTCACAAGCTATGGCATAAACTGGGTGAAGCAGAGAACTGGACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGTGGTAACGCTTACTATAATGAGAAGTTCAAGGTCAAGGCCAAACTGACTACAGACAATTCCTCCAGGACAGCCTACATGCAGCTCATCAACCTGACATCTGAGGATTCTGCAGTCTATTTCTGTGCAAGGGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	38
SC34.11	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTGGCTGTGTCAGCAGGAGAGAAGGTCACTATGAGCTGCAAATCCAGTCAGAGTCTGCTCAACAGTAGAACCCGAAAGAACTACTTGGCTTGGTACCAGCAGAAGCCAGGACAGTCTCCTAAACTGCTGATCTACTGGGCATCCACTCGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTGTGCAGGCTGAAGACCTGGCAGTTTATTACTGCAAGGAATCTTATAATCTCTGGACTTTCGGTGGAGGCACCAAGCTGGAAATCAAA	40
SC34.11	Heavy Chain	CAGGTCCAGCTTCAGCAGTCTGGGGCTGAACTGGCAAAACCTGGGGCCTCAGTGAAGATGTCCTGCAAGGCTTCTGGCTACACCTTTACTAACTATTGGATGATCTGGGTAAAACAGAGGCCTGGACAGGGTCTGGAATGGATTGGATACATTGATCCCACCACTGACTATACTGCGTACAATCAGAAGTTCAAGGACAAGGCCACAGTGACTGCAGACAAATCCTCCAGCACAGCCTACATGCAACTGAACAGCCTGACATCTGAGGACTCTGCAGTCTATTACTGTGCAAGAGGGGGGAATGTGGCTTTGGACTTTTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA	42
SC34.13	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGGTTACTCTGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTAGGTATCAAAAGAACTATTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAGACTGGTGATTTACTGGGCATCTACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTGTGAAGGCTGAAGACCTGGTAGTTTATTATTGTCAGCAATATTATAGGTATCCGCTCACGTTCGGTTCTGGGACCAAGCTGGAGCTGAAA	44
SC34.13	Heavy Chain	CAGGTTCAGGTGCAGCAGTCTGGAGCTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGCAAGGCTTCTGGATACACCTTCACAAGCTATGCTATAAGCTGGGTGAAGCAGAGAACTGGACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGTGGTAATACTTACTACAATGGGAAGTTCAAGGGCAAGGCCACACTGACTACAGACAAATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCGATGATTACGGTTCCTGGTTTCCTTATTGGGGCCAAGGGACTCTGGTCACTGTGTCTGCA	46
SC34.14	Light Chain	GACATCCAGATGACTCAGGCTCCAGCCTCCCTATCTCCATCTGTGGGAGCAACTGTCACCATCACATGTCGAACAAGTGAACATATTTACAGTTATTTAGCATGGTATCAGCAGAAACAGGGAAAATCTCCTCGGTTATTGGTCTATAATGCAAAAACCTTAGCAGAAGGTGTGTCATCAAGGTTCAGTGGCAGTGGATCAGGCACACAGTTTTCTCTGCAGATCAACAGCCTGCAGCCTGAAGATTTTGGAAATTATTACTGTCAACATCATTATGATACTCCGTACACGTTCGGAGGGGGGACCAAGCTGGAAATAAAA	48
SC34.14	Heavy Chain	GAGGTCCAACTGCAGCAGTCTGGACCTGAGATGGTGAAGCCTGGGGCTTCAGTGAAGATATCCTGCAAGGCTTCTGGATACATATTCACTGACTACTACATGCACTGGGTGAAGCAGAGCCATGGAGAGAGCCTTGACTGGATTGGACGTGTTAATCCTAAAAAAGGTGGTACTACCTACAACCAGAAGTTCGAGGGCAAGGCCATATTGACTGTTGACAAGTCCTCCAGCACAGCCTACATGGACCTCAACAGCCTGACATCTGAGGACTCTGCGGTCTATTACTGTGCAATGGGTATCTACTATAGTTACGACGCCTCCTTTGACTACTGGGGCCAAGGCACCACTCTCACAGTCTCCTCA	50

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FIG. 5C Cont.

Anti-DPEP3 Murine Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
SC34.16	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGGTTACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTAGATATCAAAAGAATTACCTGGCCTGGTA CCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATTTACTGGTCATCCACTCGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTG TGAAGGCTGAAGACCTGGCAGATTATTACTGTCAGCAATATTATAGGTATCCACTCACGTTCGGTGCTGGGACCAAGCTGGAGCTGAAA	52
SC34.16	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAACTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGCAAGGCTTCTGAATACACCTTCACAAGCTATGCTATAACCTGGGTGAGGCAGAGAACTGG ACAGGGCCTTGAGTGGATTGGAGAGATTTATCCCGGAAGTGGTAATACTTACTACAATGAGACTTTCAAGGGCAAGGCCACACTGACTTCAGACAAATCCTCCAGCACAGCCTCCATGCAGCTCA GCAGCCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	54
SC34.18	Light Chain	GACATTGTGATGACCCAGTCTCAAAAATTCATGTCCACATCAGTAGGAGACAGGGTCAGTATCACCTGCAAGGCCAGTCAGAATGTTCGTACTGCTGTAGGCTGGTATCAACAGAAACCAGGGCA GTCTCCTAAAACACTGATTTACTTGGCATCCAACCGGCACACTGGAGTCTCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATTAGTAATGTGCAATCTGAAGACCTGG CAGATTATTTCTGTCTGCAACATTGGAATTATCCGTGGACGTTCGGTGGAGGCACCAAGCTGGAAATCAAA	56
SC34.18	Heavy Chain	CAGGTTTCTCTGAAAGAGTCGGGCCCTGGGATATTGCAGCCCTCCCAGACCCTCAGTCTGACTTGTTCTTTCTCTGGGTTTTCACTGAGCACTTCTGGTATGGGTGTAGGCTGGATTCGTCAGCC TTCAGGGAAGGGTCTGGAGTGGCTGGCCAACATTTGGTGGGATGATAGTATTTACTATAACACAGCCCTGAAGAGTCGGCTCACAATCTCCAAGGATACCTCCAAAAACCAGGTCTTCCTCAAGA TCGCCAGTGTGGACACTGCAGATACTGCCACATACTCCTGTGCTCGAATAGAATCCTACTATGGTAACCGGGCCTGGTTTGCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	58
SC34.19	Light Chain	GACATTGTGATGTCACAGTCTCCTTCCGCCCTAGCTGTGTCAGTTGGAGAGAAGATTACTATGAGCTGCAAGTGTAGTCAGAGCCTCTTACATAGTCGCGATCAAAAGAACTACCTGGCCTGGTA TCAGCAGAAACCAGGGCAGTCTCCCAAACTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAACACTG TGAAGGCTGAAGACCTGGCAGTTTATTACTGTCAGCAACATTATAGGTATCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAGCTGAAA	60
SC34.19	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGCAAGGCTTCTGGATACACCTTCACAAGCTATGCTATAACCTGGGTGAAGCAGAGAACTGG ACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGTGGTAATACTTTCTTCAATGAGAAGTTCAAGGGCAGGGCCACACTGACTACAGACAAATCCTCCAGCACAGCCTACATGCAGCTCA GCAGCCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCTAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	62
SC34.20	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTAACTGTGTCAGTTGGAGAGAAGGTTACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTACCTATCAAAAGAACTACCTGGCCTGGTT CCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTG TGAAGGCTGAAGACCTGGCAGTTTATTACTGTCAGCAATATTATAGGTATCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAGCTGAAA	64
SC34.20	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGATCTGAACTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGCAAGGCTTCTGGATACACCTTCAGAAGCTATGCTATAAGCTGGGTGAGGCAGAGAACTGG ACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGAAAGTGGTAATACTGACTACAATGCGCAGTTCAAGGGCAAGGCCACACTGACTACAGACAAATCCTCCAGCACAGCCTACATGCAGCTCA GCAGCCTGACATCTGAGGCCTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	66

FIG. 5C Cont.

Anti-DPEP3 Murine Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
SC34.23	Light Chain	CAAATTGTTCTCACCCAGTCTCCAGCAATCATGTCTGCATCTCTAGGGGAGGAGATCACCCTAACCTGCAGTGCCAGCTCGAGTGTAAGTTACATGCACTGGTACCAGCAGAAGTCCGGCACTTC TCCCAAACTCTTGATTTATAGCACTTCCAACCTGGCTTCTGGAGTCCCTTCTCGCTTCAGTGGCAGTGGGTCTGGGACCTTTTATTCTCTCACAATCAACACTGTGGAGGCTGAAGATGCTGCCG ATTATTACTGCCATCAGTGGAGTAGTTGGACGTTCGGTGGAGGCACCAAGCTGGAAATCAAA	68
SC34.23	Heavy Chain	GAGGTGCAGCTTCAGGAGTCAGGACCTAGCCTCGTGAAACCTTCTCAGACTCTGTCCCTCACCTGTTCTGTCACTGGCGACTCCATCACCAGTGGTTCCTGGAACTGGATCCGGAAATTCCCAGG GAATAAACTTGAGTACATGGGATACATAAACTACAGTGGTGGCACTTACTACAATCCATCTCTCAAAAGTCGAATCTCCATCACTCGAGACACATCCAAGAACCACTACTACCTGCAGTTGAATT CTGTGACTACTGAGGACACAGCCACATATTACTGTGGAAGACGACTGGGATCGGGGGGCTGGTTTGGTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	70
SC34.24	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGGTTACTATGAACTGCAAGTCCAGTCAGAGCCTTTTATATAGTAGATATCAAAAGAACTACCTGGCCTGGTA CCAGCAGAAACCAGGACAGTCTCCTAAACTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGTG TGAAGGCTGAAGACCTGGCAGTTTATTACTGTCAGCAATATTATAGGTATCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAGCTGAAA	72
SC34.24	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGACCTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGCAAGGCTTCTGAATACACCTTCACAAGCTATGCTATAACCTGGGTGAAGCAGAGAGCTGG ACAGGGCCTTGAGTGGATTGGGGAGATTTATCCTGGAAGTGGTGATACTTACTACAATGAGAAGTTCAAGGGCAAGGCCACACTGACTACAGACAAATCCTCCAGCACAGCCTACATGCAGCTCA GCAGCCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	74
SC34.25	Light Chain	GACATAGTGATGTCACAGTCTCCATCCTCCCTAGCTGTGTCAGGTGGAGAGAAGGTCACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTAGGTATCAAAAGAACTACGTGGCCTGGTA CCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGTAGTG TGAAGGCTGAAGACCTGGCAGTTTATTACTGTCAGCAATATTATAGGTATCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAGCTGAAA	76
SC34.25	Heavy Chain	CAGGTGCAGCTGCAGCAGTCTGGAGTTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGGTGTCCTGCAAGGCTTCTGGATACACCTTCACAAGCTATGCTATAAGCTGGGTGAAGCAGAGAACTGG ACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGTGGTGAAACTTACTACAATGAGAAGTTCAAGGGCAAGGCCACACTGACTACAGACAAATCATCCAGTACGGCCTACATGCACCTCA GCAGCCTGACATCTGAGGACTCTGCAGTCTATTTATGTGGAAGAGTCAATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	78
SC34.26	Light Chain	GATGTTGTGCTGACCCAGACTCCACTCACTTTGTCGGTTACCATTGGACAACCAGCCTCTATCTCTTGCAAGTCAAGTCAGAGCCTCTTATATAGTAATAGAAGAACCTATTTGAATTGGTTATT ACAGAGGCCAGGCCAGTCTCCAAAGCGCCTAATCTATCTGGTGTCTAAACTGGACTCTGGAGTCCCTGACAGGTTCACTGGCAGTGGATCGGGAACAGATTTTACACTGAAAATCAGCAGGGTGG AGGCTGAGGATTTGGGAGTTTATTACTGCGTACAAGGTACACATTTTCCGTACACGTTCGGTACTGGGACCAAGCTGGAGCTGAAA	80
SC34.26	Heavy Chain	CAGGTCCAACTGCAGCAGCCTGGGGCTGAACTGGTGAAGCCTGGGGCTTCAGTGACATTGTCTTGCAAGGCTTCTGGCTACACCTTCACCAGCTACTATATCTACTGGGTGAAGCAGAGGCCTGG AGAAGGCCTTGAGTGGATTGGAGAGATTAATCCTAGCAATGGTGGTCCTAACTTCAATGAGAGATTCAAGAACAAGGCCACACTGACTGTTGACAAATCCTCCAGCACAGCCTACATGCAACTCA GCAGCCTGACATCTGAGGACTCTGCGGTCTATTACTGTACAAGAGGCCTGCTCTACTATGATTACGACAGGGGGTTTGCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	82

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FIG. 5C Cont.

Anti-DPEP3 Murine Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
SC34.27	Light Chain	GACATTGTGATGTCTCAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGGTTACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTCGCAATCAAAAGAACTACCTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAACAGTGTGAAGGCTGAAGACCTGGCAGTTTATTACTGTCACCAATATTATAGGTATCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAACTGAAA	84
SC34.27	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGTTGTCCTGCAAGGCTTCTGGATACACCTTCAGAAGTTATGGTATAAACTGGGTGAAGCAGAGAACTGGACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGAGGTGATGTTTACTACAATGAGAATTTCAAGGGCAAGGCCACACTGACTACAGACAAATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	86
SC34.28	Light Chain	CAAATTGTTCTCACCCAGTCTCCAGCAATCATGTCTGCATCTCTAGGGGAACGGGTCACCATGACCTGCACTGCCAGCTCAAGTGTAAATTCCTTTTACTTGCACTGGTACCAGCAGAAGCCAGGATCCTCCCCCAAACTCTGGATTCATAGCACATCCAACCTGGCTTCTGGAGTCCCAGGTCGCTTCAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGCATGGAGGCTGAAGATGCTGCCACTTATTACTGCCACCAGTATCATCGTTCCCCGTACACGTTCGGAGGGGGGACCAAGCTGGAAATAAAA	88
SC34.28	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAGCTGATGAAGCCTGGGGCCTCAGTGAAGATATCCTGCAAGGCTACTGGCTACACATTCAGTAGCTACTGGATAGAGTGGGTAAAGCAGAGGCCTGGACATGGCCTTGAGTGGATTGGAGAGATTTTACCTGGAAGTGGTAATACTTACTACAATGAGAGATTCAAGGACAAGGCCACATTCACTGCAGATACATCCTCCAACACAGCCTACATGCAACTCAGCAGCCTGACATCTGAAGACTCTGCCGTCTATTACTGTGCAAGAAGGGCGGCCGCCTACTATAGTAACCCCGAGTGGTTTGCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	90
SC34.33	Light Chain	CAAATTGTTCTCACCCAGTCTCCAGCAATCATGTCTGCATCTCTAGGGGAACGGGTCACCATGACCTGCACTGCCAGCTCAAGTGTAAATTCCTTTTACTTACACTGGTACCAGCAGAAGCCAGGATCCTCCCCCAAACTCTGGATTCATAGCACATCCAACCTGGCTTCTGGAGTCCCAGGTCGCTTCAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGCATGGAGGCTGAAGATGCTGCCACTTATTACTGCCACCAGTATCATCGTTCCCCGTACACGTTCGGAGGGGGGACCAAGCTGGAAATAAAA	92
SC34.33	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAGCTGATGAAGCCTGGGGCCTCAGTGAAGATATCCTGCAAGGCTACTGGCTACACATTCAGTAGCTACTGGATAGAGTGGGTAAAGCAGAGGCCTGGACATGGCCTTGAGTGGATTGGAGAGATTTTACCTGGAAGTGATAAAACTTACTACAATGAGAGGTTCAAGGACAAGGCCACATTCACGGCAGATACATCCTCCAACACAGCCTACATGCAACTCAGCAGCCTGACATCTGAAGACTCTGCCGTCTATTACTGTACAAGAAGGGCGGCCGCCTACTATAGTAACCCCGAGTGGTTTGCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	94
SC34.36	Light Chain	GATATCCAGATGACACAGACTACATCCTCCCTGTCTGCCTCTCTGGGAGACAGAGTCACCATCAGTTGCAGGGCAAGTCAGGACATTAGCAATTATTTAAACTGGTATCAGCAGAAACCAGATGGAACTGTTAAACTCCTGATCTACTACACATCAAGATTACACTCAGGAGTCCCATCAAGGTTCAGTGGCAGTGGGTCTGGAACAGATTATTCTCTCACCATTAGCAACCTGGAGCAAGAGGATATTGCCACTTACTTTTGCCAGCAGGGTAATACGCTTCCGTGGACGTTCGGTGGAGGCACCAAGCTGGAAATCAAA	96
SC34.36	Heavy Chain	CAGGTCCAACTGCAGCAGCCTGGGTCTGTGCTGGTGAGGCCTGGAGCTTCAGTGAAGCTGTCCTGCAAGGCTTCTGGCTACACATTCACCAGCTACTGGATGCACTGGGTGAAGCAGAGGCCTGGACAAGGCCTTGAGTGGATTGGAGAGATTTCTCCTACTAGTGGTAGGCCTAACTACAATGCGAAGTTCAAGGGCAAGGCCACACTGACTGTTGACACATCCTCCAGCACAGCCTACGTGGATCTCAGCAGCCTGACATCTGAGGACTCTGCGGTCTATTACTGTGCAAAAGGGGAGGGCTACTATGGTAAAGCCTTTGACTACTGGGGCCAAGGCACCACTCTCACAGTCTCCTCA	98

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FIG. 5C Cont.

Anti-DPEP3 Murine Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
SC34.38	Light Chain	GATGTTGTGCTGACCCAGACTCCACTCACTTTGTCGGTTACCATTGGACAACCAGCCTCTATCTCTTGCAAGTCAAGTCAGAGCCTCTTATATAGTAATAGAAGAACCTATTTGAATTGGTTATT ACAGAGGCCAGGCCAGTCTCCAAAGCGCCTAATCTATCTGGTGTCTAAACTGGACTCTGGAGTCCCTGACAGGTTCACTGGCAGTGGATCGGGAACAGATTTTACACTGAAAATCAGCAGGGTGG AGGCTGAGGATTTGGGAGTTTATTACTGCGTACAAGGTACACATTTTCCGTTCACGTTCGGTACTGGGACCAAGCTGGAGCTGAAA	100
SC34.38	Heavy Chain	CAGGTCCAACTGCAGCAGCCTGGGGCTGAACTGGTGAAGCCTGGGGCTTCAGTGACATTGTCTTGCAAGGCTTCTGGCTACACCTTCACCAGCTACTATATGTACTGGGTGAAGCAGAGGCCTGG AGAAGGCCTTGAGTGGATTGGAGAGATTAATCCTAGCAATGGTGGTGCTAACTTCAATGAGAGATTCAAGAACAAGGCCACACTGACTGTTGACAAATCCTCCAGCACAGCCTACATGCAACTCA GCAGCCTGACATCTGAGGACTCTGCGGTCTTTTACTGTACAAGAGGCCTGCTCTACTATGATTACGACAGGGGGTTTGCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	102
SC34.39	Light Chain	CAAATTGTTCTCACCCAGTCTCCAGCAATCATGTCTGCATCTCAAGGGGAACGGGTCACCATGACCTGCACTGCCAGCTCAAGTGTAAGTTCCAATTACTTGCACTGGTACCAGCAGAAGCCAGG ATCCTCCCCCAAACTCTGGATTTATAGCACATCCCACCTGGCTTCTGGAGTCCCAGTTCGCTTCAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGCATGGAGGCTGAAGATG CTGCCACCTATTACTGCCACCAGTATCATCGTTCCCCGTACACGTTCGGAGGGGGGACCAAGCTGGAAATCAAA	104
SC34.39	Heavy Chain	CAGGTTCAACTGCAGCAGTCTGGAGCTGAGCTGATGAAGCCTGGGGCCTCAGTGAAGATATCCTGCAAGGCTACTGGCTACACATTCAGTAACTACTGGATAGAGTGGGTAAAGCAGAGGCCTGG ACATGGCCTTGAGTGGATTGGAGAGATTTTACCTGGAAGTGATAGTACTTACTTCAATGAGAAGTTCAAGGGCAAGGCCACATTCACTGCAGATACATCCTCCAACACAGCCTACATGCAACTCA GCAGCCTGACATCTGAGGACTCTGCCGTCTATTACTGTACAATAAGGTCGGCCGCCTACTATAGTAACCCCGAGTGGTTTGCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	106
SC34.40	Light Chain	GACATCCAGATGACTCAGTCTCCAGCCTCCCTATCTGCATCTGTGGGAGAAACTGTCACCATGACATGTCGAGCAAGTGAGAATATTTACAGTAATTTAGCATGGTATCAGCAGAAACAGGGAAA ATCTCCTCAGGTCCTGGTCTATGCTGCAACAAACTTAGCAGATGGTGTGCCATCAAGGTTCAGTGGCAGTGAATCAGGCACACAGTTTTCTCTGAAGATCAACAGCCTGCAGCCTGAAGATTTTG GGAGTTATTACTGTCAACATTTTTATGGTACTCCGTGGACGTTCGGTGGAGGCACCAAGCTGGAAATCAAA	108
SC34.40	Heavy Chain	GAGGTGCAGCTTCAGGAGTCAGGACCTGGCCTGGCAAAACCTTCTCAGACTCTGTCCCTCACCTGTTCTGTCACTGGCTACTCCATCACCAGTGATTACTGGAACTGGATCCGGAAATTCCCAGG GAATAAACTTGAGTACATGGGGTACATAACCTACAGTGGTAGTACTTACTACAATCCATCTCTCAAAAGTCGAATCTCCATCACTCGAGACACATCCAAGAACCAGTATTACCTGCAGTTGAATT CTGTGACTACTGAGGACACAGCCACATATTACTGTGCAAGAGCGAGGGTTTATTACTACGATGGTAGATACGGCCGCGCTATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA	110
SC34.41	Light Chain	GACATCCAGATGATTCAGTCTCCATCGTCCATGTTTGCCTCTCTGGGAGACAGAGTCAGTCTCTCTTGTCGGGCTAGTCAGGGCATTAGAGGTAATTTAGACTGGTATCAGCAGAAACCAGGTGG AACTATTAAACTCCTGATCTACTCCACATCCAATTTAAATTCTGGTGTCCCATCAAGGTTCAGTGGCAGTGGGTCTGGGTCAGATTATTCTCTCACCATCAGCAGCCTAGAGTCTGAAGATTTTG CAGACTATTACTGTCTACAGCGTGATGCGTATCCGTACACGTTCGGAGGGGGGACCAAGCTGGAAATAAAA	112
SC34.41	Heavy Chain	GAAGTGAAGCTGGTGGAGTCTGGGGGAGGCTTAGTGAAGCCTGGAGGGTCCCTGAAACTCTCCTGTGCAGCCTCTGGATTCACTTTCACTAGCTATACCATGTCTTGGGTTCGTCAGACTCCGGC GAAGAGGCTGGAGTGGGTCGCAACCATTAGTACTGGTGGTGGTAACACCTACTATCCAGACATTGTGAAGGGCCGATTCACCATCTCCAGAGACAATGCCAGGAGCACCCTGTACCTTCAAATGA GCAGTCTGAGGTCTGAGGACTCGGCCATGTATTACTGTGCAAGACGATTCTACGATGGTAGCTACAACTACTGGTACTTCGATGTCTGGGGCGCAGGGACCACGGTCACCGTCTCCTCA	114

FIG. 5C Cont.

Anti-DPEP3 Murine Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
SC34.46	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGGTTACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTAAATATCAAAAGAACTTCCTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAATGTGAAGGCTGAAGACCTGGCAGTTTATTACTGTCAGCAGTATTATAGGTATCCGCTCACGTTCGGTGCTGGGACCACGCTGGAGCTGAAA	116
SC34.46	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAACTGAACTGGCGAGGCCAGGGACTTCAGTGAAGCTGTCCTGCAAGGCTTCTGGATACACCTTCAGAAGCTATGCTATAAGTTGGGTGAGACAGAGAACTGGACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGTGATAAAACTTACTATAATGAAAGCTTAAAGGGCAAGGTCACCCTGACTACAGACAAATGTTCCAGCACAGCCAACATGCAGCTCACCAGCCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	118
SC34.48	Light Chain	GACATCCAGATGACTCAGGCTCCAGCCTCCCTATCTGCATCTGTGGGAGAAACTGTCACCATCACATGTCGAACAAGTGGACATATTTACAGTTATTTAGCATGGTATCAGCAGAAACAGGGAAAATCTCCTCAGTTATTGGTCTATAATGCAAAAACCTTAGCAGAAGGTGTGTCATCAAGGTTCAGTGGCAGTGGATCAGGCACACAGTTTTCTCTGAAGATCACCAGCCTGCAGCCTGAAGATTTTGGAGATTATTACTGTCAACATCATTATGATACTCCGTACACGTTCGGAGGGGGGACCAAGCTGGAGATAAAA	120
SC34.48	Heavy Chain	GAGGTCCAGCTGCAACAGTCTGGACTTGAGATGGTGAAGCCTGGGGCTTCAGTGAAGATATCCTGCAAGGCTTCTGGATACATATTCACTGACTACTACATGCACTGGGTGAAGCAGAGCCATGGAAAGAGCCTTGACTGGATTGGACGTGTTAATCCTAAAAAAGGTGGTACTACCTACAACCAGAAGTTCGAGGGCAAGGCCACATTGACTGTTGACAAGTCCTCCAGCACAGCCTACATGGACCTCAACAGCCTGACATCTGAGGACTCTGCGGTCTATTACTGTGCAATGGGTATCTACTTTAGTTACGACGCCTCCTTTGACTACTGGGGCCAAGGCACCACTCTCACAGTCTCCTCA	122
SC34.49	Light Chain	GACATCCAGATGACACAATCTTCATCCTACTTGTCTGTATCTCTAGGAGGCAGAGTCACCATTACTTGCAAGGCAAGTGAACACATTAATAATTGGTTAGCCTGGTATCAGCAGAAACCAGGAAATCCTCCTAGGCTCTTAATATCTGGTGCAACCAGTTTGGAAACTGGGGTTCCTTCAAGATTCAGTGGCAGTGGATCTGGAAAGGATTACACTCTCAGCATTACCGGTCTTCAGACTGAAGATATTGCTACTTATTTCTGTCAACAGTATCGGAGTACTCCATTCACGTTCGGCTCGGGGACAAAGTTGGAAATAAAA	124
SC34.49	Heavy Chain	GAGGTCCAGCTGCAACAGTCTGGACCTGAGCTGGTGAAGCCTGGGTCTTCAGTGAAGATATCCTGTAAGGCTTCTGGATACACATTCACTGACTACCACATGAACTGGGTGAAGCAGAGCCATGGAAAGAGCCTTGAGTGGATTGGAAATATTAATCCTTACTATGGTGTTAGTACCTACAACCAGAACTTAAAGGGCACGGCCACATTGACTGTAGACAAGTCCTCCAGCACAGCCTACATGGAGCTCCGCGGCCTGACATCTGAGGACTCTGCAGTCTATTACTGTGTAAGAAGGGCTATGGATTCCCCCCGGTTTGCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	126
SC34.50	Light Chain	GACATCCAGATGACACAATCTTCATCCTCCTTTTCTGTATCTCTAGGAGACAGAGTCACCATTACTTGCAAGGCAAGTGAGGACATATATAATCGGTTAGCCTGGTATCAGCAGAAACCAGGAAATGCTCCTAGGCTCTTAATATCTGGTGCGACCAGTTTGGAAACTGGGGTTCCTTCAAGATTCAGTGGCAGTGGATCTGGAAAGGATTACACTCTCAGCATTACCAGTCTTCAGACTGAAGATGTTGCTACTTATTACTGTCAACAGTATTGGAGTACTATATTCACGTTCGGCTCGGGGACAAAGTTGGAAATAAAA	128
SC34.50	Heavy Chain	CAGGTCCAACTGCAGCAGCCTGGGGCTGAGCTGGTGAGGCCTGGGGCTTCAGTGAAGCTGTCCTGCAAGGCTTCTGGCTACACCTTCACCAGCTACTGGATAAACTGGGTGAAACAGAGGCCTGGACAAGGCCTTGAGTGGATCGGAAATATTTTTCCTTCTGATAGTTATACTAACTACAATCAAAAGTTCAGGGACAAGGCCACATTGACTGTAGACAAATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCCGACATCTGAGGACTCTGCGGTCTATTACTGTACAATCCGTACCTATGGTAACTACTTTGACTACTGGGGCCAAGGCACCACTCTCACAGTCTCCTCA	130

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FIG. 5C Cont.

Anti-DPEP3 Murine Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
SC34.53	Light Chain	GATGTTGTGCTGACCCAGACTCCACTCACTTTGTCGGTTACCATTGGACAACCAGCCTCTATCTCTTGCAAGTCAAGTCAGAGCCTCTTATATAGTAATAGAAGAACCTATTTGAATTGGTTATT ACAGAGGCCAGGCCAGTCTCCAAAGCGCCTAATCTATCTGGTGTCTAAACTGGACTCTGGAGTCCCTGACAGGTTCACTGGCAGTGGATCGGGAACAGATTTTACACTGAAAATCACCAGGGTGG AGGCTGAGGATTTGGGAGTTTATTACTGCGTACAAGGTACACATTTTCCGTACACGTTCGGTACTGGGACCAAGCTGGAGATCAAA	132
SC34.53	Heavy Chain	CAGGTCCAACTGCAGCAGCCTGGGGCTGAACTGGTGAAGCCTGGGGCTTCAGTGACATTGTCTTGCAAGGCTTCTGGCTACACCTTCACCAGCTACTATATCTACTGGGTGAAGCAGAGGCCTGG AGAAGGCCTTGAGTGGATTGGAGAGATTGATCCTAGCAATGGTGGTCCTAACTTCAATGACAGATTCAAGAACAAGGCCACACTGACTGTTGACAAATCCTCCAGCACAGCCTACATGCAACTCA GCAGCCTGACATCTGAGGACTCTGCGGTCTATTACTGTACAAGAGGCCTGCTCTACTATGATTACGACAGGGGGTTTGCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	134
SC34.58	Light Chain	GACATTGTGATGTCTCAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGGTTACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTCGCAATCAAAAGAACTACCTGGCCTGGTA CCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTG TGAAGGCTGAAGACCTGGCAGTTTATTACTGTCACCAACATTATAGGTATCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAACTGAGA	136
SC34.58	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGCAAGGCTTCTGGATACACCTTCACAAGCTATGGTGTAAACTGGGTGAAGCAGAGAACTGG ACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGAGGTGATGTTTACTACAATGACAATTTCAAGGGCAAGGCCACACTGACTACAGACAAATCCTCCAGCACAGCCTACATGCAGCTCA GCAGTCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	138
SC34.63	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGGTTACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTAAATATCAAAAGAACTACTTGGCCTGGTA CCAGCAGAAACCAGGGCAGTCTCCTAAATTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGAATCTGGGACAGATTTCACTCTCACCATCAGCAGTG TGAAGGCTGAAGACCTGGCAGTTTATTACTGTCAACAATATTATAGGTATCCGCTCACGGTCGGAGCTGGGACCAAGCTGGAGCTGAAA	140
SC34.63	Heavy Chain	CAGGTTCAACTGCAGCAGTCTGGAGTTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGTAAGGCTTCTGGATACACCTTCACAAGCTATGGTATTGATTGGGTGAAACAGAGAACTGG ACAGGGCCTTGAGTGGATTGGAGAGACTTATCCTGGAAGAGGTGATACTTACTACAATGAAAACTTCAAGGGCAAGGCCACACTGACTACAGACAAATCCTCCAGCACAGCCTTCTTACAGCTCA GCAGCCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	142
SC34.67	Light Chain	GACATGGTGATGTCACAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGGGAGAAGGTTGCTCTGAGCTGCAAGTCCAGTCAGAGCCTTTTACATAGTAGAGATCAAAAGAACTACCTGGCCTGGTA CCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATTCACTGGGCATCCACTAGGGAATCTGGGGTCCCTGCTCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTG TGAAGGCTGAAGACCTGGCAGTTTATTACTGTCAGCAATCTTATAGGTATCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAGCTGAAA	144
SC34.67	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAGCTGGCGAGGCCAGGGGCTTCAGTGAGACTGTCCTGCAAGGCTTCTGGATACACCTTCACAAGCTATGGTATAAACTGGGTGAAGCAGAGAACTGG ACAGGGCCTTGAGTGGATTGGGGAGATTTATCCTGGAAGTGGTGACAGTTACTACAATAAGACGTTCAAGGGCAAGGCCATATTGACTACAGACAAATCCTCCAGCACAGCCTACATGCAGCTCA GCAGCCTGACACCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCCAGGGGCTCTGGTCACTGTCTCTGCA	146

FIG. 5C Cont.

Anti-DPEP3 Murine Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
SC34.71	Light Chain	GACATTGTGATGACCCAGTCTCAAAAATTCATGTCCACATCAGTAGGAGACAGGGTCAGCATCACCTGCAAGGCCAGTCAGAATGTTCGTACTGCTGTAGCCTGGTATCAACAGAAACCAGGGCA GTCTCCTAAAACACTGATTTACTTGGCATCCAACCGGCACACTGGAGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATTAGCTATGTGCAATCTGAAGACCTGG CAGATTATTTCTGTCTGCAACATTTGAATTATCCGTGGACGTTCGGTGGAGGCACCAAGCTGGAAATCAAA	148
SC34.71	Heavy Chain	CAGGTTTCTCTGAAAGAGTCGGGCCCTGGGATATTGCAGCCCTCCCAGACCCTCAGTCTGACTTGTTCTTTCTTTGGGTTTTCACTGAGCACTTCTAGTATGGGTGTAGGGTGGATTCGTCAGCC TTCAGGGAAGGGTCTGGAGTGGCTGGCAAACATTTGGTGGGATAATAATAAATACTATAACGCAGCCCTGAAGAGCCGGCTCACAATCTCCAAGGATACCTCCAAAAACCAGGTTTTCCTCAACA TCGCCAGTGTGGACACTACAGATACTGCCACATACTACTGTGCTCGAATAGAATCCTACTATAGTAATCGGGCCTGGTTTCCTTACTGGGGCCGAGGGACTCTGGTCACTGTCTCTGCA	150
SC34.76	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAGGGTTACGATGAACTGCAAGTCCAGTCAGAGCCTTTTCTATAGTCGCTATCAAAAGAACTACCTGGCCTGGTA CCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTG TGAAGGCTGAAGACCTGGCAGTTTATTACTGTCAGCAATATTATAGGTATCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAGCTGAAA	152
SC34.76	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGCAAGACTTCTGAATACACCTTCACAAGCTATGCAATAAACTGGGTGAAGCAGAGAACTGG ACAGGGCCTTGAGTGGATTGGAGAGGTTTATCCTGGAAGTGGTAATACTTATTACAATGAGAAGTTCAAGGGCAAGGCCATACTGACGACAGACAAATCCTCCAGCACAGGCTACATGCAGCTCA GCAACCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGGTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	154
SC34.78	Light Chain	GACATTATGATGACTCAGTCTCCAGCCACGCTGTCTGTGACTCCAGGAGATAGAGTCTCTCTTTCCTGCAGGGCCAGCCAGAGTATTGGCGCCTACTTACACTGGTATCAACAAAAATCACATGA GTCTCCAAGGCTTCTCATCAAATATGTTTCCCAATCCATCTCTGGGATCCCCTCCAGGTTCAGTGGCAGTGGATCAGGGTCAGATTTCACTCTCAGTATCAACAGTGTGGAACCTGAAGATGTTG GAGTGTATTACTGTCAAAATGGTCACAGCTTTCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAGCTTAAA	156
SC34.78	Heavy Chain	GATGTGCAGCTTCAGGAGTCGGGACGTGGCCTGGTGAAACCTTCTCAGTCTCTGTCCCTCACCTGCACTGTCACTGGCTACTCACTCACCAGTGATTTTGCCTGGAACTGGATCCGGCAGTTTCC AGGAAACAAACTGGAGTGGATGGGCTACATAAGGTACAGTGGTACCACTAGCTACAATCCATCTCTCAAAAGTCGAATCTCTATCACTCGAGACACATCCAAGAACCAGTTCTTCCTGCAGTTGA ATTCTGTGACAACTGAGGACACAGCCACATATTACTGTGGCTATGGTAACTACGGGTATGCTATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA	158
SC34.83	Light Chain	CAAATTGTTCTCATCCAGTCTCCAGCAATCATGTCTGCATCTCCAGGGGAGAATGTCACCATGACCTGCAGTGCCAGTTCAAGTGTAAGTTACATGCACTGGTACCAGCAGAAGTCTGGCACCTC CCCCAAAAGATGGATTTATGACACATCCAAACTGGCTTCTGGAGTCCCTGCTCGCTTCAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGCATGGAGGCTGAAGATGCTGCCA CTTATTATTGCCAGCAGTGGAATAGTTACCCACCCACGTTCGGTGCTGGGACCAAGCTGGAGCTGAAA	160
SC34.83	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGGGCTGAGCTGGTGAAGCCTGGGGCCTCAGTGAAGATATCCTGCAAAGCTTCTGGCTACGCATTCAGTCACTCCTGGATGAACTGGGTGAAGCAGAGGCCTGG AAAGGGTCTTGAGTGGATTGGACGGATTTATCCTGGAGATGGAGATATTAATTATAATGGGAAGTTCAAGGGCAAAGCCACACTGACTGCAGACAAGTCCTCCAGCACAGCCTACATGCAACTCA GCAGCCTGACATCTGAGGACTCTGCGGTCTACTTCTGTGCAAGAAGGGGCCCCTCCTATAATAATTACTGTTTTGACTATTGGGGCCAAGGCACCACTCTCACAGTCTCCTCA	162

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FIG. 5C Cont.

Anti-DPEP3 Murine Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
SC34.86	Light Chain	GACACTGTGATGTCACAGTCTCCATCCTCCCTAGCGGTGTCAGTTGGAGAGAAGGTTACTCTGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTAGGTATCAAAAGAACTACCTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAATTGCTGCTTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGACCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTGTGAAGGCTGAAGACCTGGCAGTTTATTACTGTCAGCAACATTATAGGTATCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAGCTGAAA	164
SC34.86	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGTAAGGCTTCTGGATACACCTTCACAAGCTATACTATAACCTGGGTGAAGCAGAGAACTGGACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGTGGTAATACTTACTACAATGAGAAGTTCAAGGGCAAGGCCACACTGACTACAGACAAATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	166
SC34.87	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTGGCTGTGTCAGCAGGAGAGAAGGTCACTATGAGCTGCAAATCCAGTCAGAGTCTGCTCAACAGTAGAACCCGAAAGAACTACTTGGCTTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATCTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGGTCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTGTGCAGGCTGAAGACCTGGCAGTTTATTACTGCAAGCAATCTTATAATCTGTGGACGTTCGGTGGAGGCACCAAGCTGGAAATCAAA	168
SC34.87	Heavy Chain	CAGGTCCAGCTTCAGCAGTCTGGGGCTGAACTGGCAAAACCTGGGGCCTCAGTGAAGATGTCCTGCAAGGCTTCTGGCTACACCTTTACTAGCTACTGGATGCTCTGGGTAAAACAGAGGCCTGGACAGGGTCTGGAATGGATTGGATACATTGATCCTAGGAATGGTTATACTGAATACAATCAGAAGTTCAAGGACAAGGCCACATTGACTGCAGACAAATCCTCCAGCACAGCCTACATGCAACTGAGCAGCCTGACATCTGAGGACTCTGCAGTCTATTACTGTACAAGAGGGGGGAATGTGGCTATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA	170
SC34.89	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTAGGTGTGTCCGTTGGAGAGAAGGTTACGCTGAGCTGCAAGTCCAGTCAGAGCCTTTTTAATAAAAGAGATCAAAAGAACTACCTGGCCTGGTACCAACAGAAACCAGGGCAGTCTCCTAAACTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACGGGCAGTGGATCTGGGACAGATTTCATTCTCACCATCAGGAGTGTGAAGGCTGAAGACCTGGCAGTTTATTACTGTCACCAATCTTATAGGTATCCGCTCACGTTCGGCGCTGGGACCAAGCTGGAGCTGAAA	172
SC34.89	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGCAAGGCTTCTGGATACACCTTCACAAGCTATGCTATAAGCTGGGTGAAACAGAGAACTAGACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGTGGTGATATTCACTACAGTGGGAAGTTCAAGGGCAAGGCCTCACTGACTACAGACAAATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATTACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	174
SC34.90	Light Chain	CAAATTGTTCTCACCCAGTCTCCAGCAATCATGTCTGCATCTCAAGGGGAACGGGTCACCATGACCTGCACTGCCAGCTCAAGTGTAAGTTCCAGTTACTTGCACTGGTACCAGCAGAAGCCAGGATCCTCCCCCAAACTCTGGATTTATAGCACATCCAACCTGGCTTCTGGAGTCCCAGTTCGCTTCAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGCATGGAGGCTGAAGATGCTGCCACCTATTACTGCCACCAGTATCATCGTTCCCCGTACACGTTCGGAGGGGGGACCAAGCTGGAAATTAAA	176
SC34.90	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAGCTGATGAAGCCTGGGGCCTCAGTGAAGATATCCTGCAAGGCTACTGGCTACACATTCAGTTACTACTGGATAGAGTGGGTAAAGCAGAGGCCTGGACATGGCCTTGAGTGGATTGGAGAGATTTTACCTGGAAGTGATACCACTTACTACAATGAGAAGTTCAAGGGCAAGGCCACATTCACTGCAGATACATCCTCCAACACAGCCTACATGCAACTCAGCAGCCTGACATCTGAGGACTCTGCCGTCTATTACTGTACAATAAGGAGGGCCGCCTACTATAGTAACCCCGAGTGGTTTGCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	178

FIG. 5C Cont.

Anti-DPEP3 Murine Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
SC34.91	Light Chain	GACATTGTGATGTCACAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGGTTACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTATATAGTACCTATCAAAAGAACTACCTGGCCTGGTTCCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTGTGAAGGCTGAAGACCTGGCAGTTTATTACTGTCAGCAATATTATAGGTATCCGCTCACGTTCGGTGCTGGGACCAAGCTGGAGCTGAAA	180
SC34.91	Heavy Chain	CAGGTTCAGCTGCAGCAGTCTGGAGCTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGCAAGGCTTCTGGATACACCTTCAGAAGCTATGCTATAAGCTGGGTGAAGCAGAGAACTGGACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGTGGTGATACTTACTACAATGAGAACTTCAAGGGCAAGGCCACACTGACTACAGACAAATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACATCTGAGGACTCTGCAGTCTATTTCTGTGCAAGAGTCCATGATAACGGTTCCTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	182
SC34.95	Light Chain	GACATTGTGCTGTCACAGTCTCCATCCTCCCTAGCTGTGTCAGTTGGAGAGAAGGTTACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTAAATAGTAGGGATCGAAAGAACTATTTGGCCTGGTGCCAACAAAAACCAGGACAGTCTCCTAAAGTGATGATTTACTGGGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTGTGAAGGCTGAAGACCTGGCAGTTTATTACTGTCAGCAATATTATAGCTATCCGCTCACGGTCGGTGCCGGGACCAAGCTGGAGCTGAAA	184
SC34.95	Heavy Chain	CAGGTTCAGGTGAAGCAGTCTGGAGCTGAGCTGGCGAGGCCAGGGGCTTCAGTGAAGCTGTCCTGCAAGGCTTCTGGATACACCTTCACAAGCTATGCTATAAACTGGCTGAAGCAGAGAACTGGACAGGGCCTTGAGTGGATTGGAGAGATTTATCCTGGAAGTGGTAATACTTACTACAATGAGAGCTTCAAAAACAAGGCCACACTGACCACAGACAAGTCCTCCACCACAGCCTACATGCAGCTCAACAGCCTGACATCTGAGGACTCTGCAGTCTATTTCTGCGCAAGAGTCCATGATTACGGTTCTTGGTTTCCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA	186

FIG. 5C Cont.

Anti-DPEP3 Humanized Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
hSC34.2	Light Chain	GACATCCAGATGACTCAGTCCCCATCAAGCCTCTCCGCCAGTGTAGGCGATAGAGTGACTATTACCTGCTCTGCAAGCCAGGGCATCACAAATTATCTCAACTGGTACCAGCAGAAGCCCGGAAAAGCACCTAAACTTCTCATCTACTATACAAGCCGGCTCCACAGCGGCGTGCCCTCCCGATTCTCTGGTAGCGGATCCGGTACAGACTTCACACTCACAATAAGCTCTCTCCAGCCTGAGGATTTTGCTACCTACTATTGTCAGCAGTACTCTAAGCTCCCCTGGACTTTTGGACAGGGGACCAAGGTGGAGATCAAA	188
hSC34.2	Heavy Chain	GAAGTTCAGCTTGTACAGAGCGGCGCCGAGGTTAAGAAACCAGGCGAATCCTTGAAGATCTCCTGCAAAGGTTCCGGATACTCATTTACAGATTACTATATTAACTGGGTCAGACAGATGCCCGGCAAGGGTCTGGAGTGGATGGGTTGGACCTATCCAGGGAGCGGTCCAACAAAGTATAATGGCAAATTTCGGGGCCAGGTTACCATATCTGCCGACAAGAGCATCTCCACAGCATATCTCCAGTGGAGCTCTCTGAAAGCATCCGATACAGCTATGTACTATTGCGCTCGGCGCGGAATCTATTACTACGACGGCATCTACCCCAATTATTTTGACTACTGGGGCCAGGGTACCACCGTCACCGTCTCGAGC	190
hSC34.11	Light Chain	GATATTCAAATGACCCAGTCTCCTTCTAGTTTGTCCGCTAGTGTGGGAGACCGAGTCACCATCACATGTAAGAGCAGTCAAAGTCTGCTGAACAGCCGTACCAGAAAAAATTATCTTGCTTGGTACCAGCAAAAACCAGGGAAAGTTCCAAAGCTGCTTATCTACTGGGCTTCTACCCGAGAATCCGGAGTGCCCAGTCGGTTCAGTGGGTCCGGTTCAGGAACAGATTTCACCCTGACAATCTCTTCACTGCAGCCTGAGGATGTGGCTACCTATTACTGTAAGGAGTCCTATAACCTCTGGACCTTCGGAGGTGGCACCAAAGTCGAGATCAAG	192
hSC34.11	Heavy Chain	GAAGTGCAGCTCGTCCAGAGTGGCGCTGAAGTCAAAAAGCCTGGGGAGAGTTTGAAGATCTCCTGCAAAGGCAGCGGCTATAGCTTCACAAACTATTGGATGATTTGGGTCCGCCAGATGCCCGGCAAGGGCCTTGAGTGGATGGGATATATCGATCCAACCACTGATTACACCGCATATAACCAGAAGTTCAAAGACCAGGTAACTATCTCAGCCGACAAAAGTATAAGCACCGCATATCTTCAGTGGTCATCACTGAAAGCCTCCGACACCGCTATGTACTATTGCGCTCGTGGAGGCAACGTGGCTCTCGACTTTTGGGGGCAGGGGACTCTGGTTACCGTCTCGAGC	194
hSC34.14	Light Chain	GATATCCAGATGACTCAGTCCCCCTCCTCTCTCTCTGCATCTGTCGGGGACAGGGTGACTATTACTTGCCGCACCTCTGAGCATATCTACTCTTACCTTGCCTGGTACCAGCAAAAGCCAGGAAAAGCTCCTAAGCTGTTGATTTATAATGCAAAGACACTGGCCGAAGGAGTGCCCTCCAGGTTTAGCGGGTCCGGATCTGGTACAGACTTTACCCTCACCATCAGTAGCCTGCAACCCGAGGACTTTGCTACTTACTACTGTCAACACCACTATGATACCCCATACACATTCGGCCAGGGGACAAAACTGGAGATTAAA	196
hSC34.14	Heavy Chain	CAGGTGCAGCTCGTTCAGAGCGGGGCCGAGGTGAAAAAGCCTGGCGCATCTGTCAAGGTCTCCTGTAAAGCCAGTGGATATACATTCACTGACTATTACATGCATTGGGTCCGCCAGGCTCCAGGCCAGAGGCTGGAGTGGATGGGCCGTGTCAACCCAAAGAAAGGTGGAACTACCTATAATCAGAAGTTCGAAGGCCGGGTCACAATCACCAGAGACACTAGTGCCAGCACTGCATATATGGAACTCAGTAGCCTCCGCAGTGAGGATACCGCTGTGTACTATTGTGCTATGGGAATTTACTACTCCTATGACGCCTCCTTTGATTACTGGGGACAGGGAACCACTGTGACTGTGTCCTCC	198
hSC34.25	Light Chain	GATATTGTGATGACACAGTCTCCCGATAGCCTTGCTGTTAGTCTCGGAGAACGTGCCACCATTAACTGCAAGTCTAGTCAGAGTTTGTTGTACTCTCGATACCAGAAAAATTATGTGGCATGGTACCAGCAGAAGCCAGGCCAGCCACCAAAACTCCTGATCTACTGGGCCTCAACCAGGGAAAGCGGAGTGCCAGATAGATTCAGCGGCAGTGGGTCAGGTACCGATTTCACTCTCACAATCAGCTCACTGCAAGCTGAGGATGTGGCAGTGTATTATTGTCAGCAGTACTATCGCTATCCCCTGACCTTTGGACAGGGCACAAAGTTGGAAATCAAA	200
hSC34.25	Heavy Chain	CAAGTACAGTTGGTGCAGAGCGGGGCTGAGGTGAAAAAACCCGGCGCTAGCGTGAAGGTTAGCTGCAAAGCCTCCGGTTACACATTTACATCCTACGCCATTTCTTGGGTGCGCCAGGCACCTGGCCAACGGCTTGAGTGGATGGGCGAAATCTACCCTGGTTCCGGTGAGACTTATTACAATGAAAAGTTCAAGGGACGCGTCACTATCACCAGGGACACCAGCGCAAGCACCGCTTATATGGAGCTGTCCTCTCTTAGATCTGAAGACACTGCTGTCTACTACTGTGCAAGGGTGAACGACTATGGATCTTGGTTCCCTTATTGGGGACAGGGCACCCTGGTTACAGTCTCTTCT	202

FIG. 5C Cont.

Anti-DPEP3 Humanized Antibody Variable Region Nucleic Acid Sequences

Name	Chain	Nucleic Acid Sequence	SEQ ID NO
hSC34.28	Light Chain	GAAATAGTACTGACCCAGAGCCCCGCTACACTCTCCTTGAGCCCTGGAGAGCGGGCAACACTCTCCTGCACAGCATCTTCCAGCGTCAATTCCTTTTACCTGCATTGGTACCAGCAGAAACCTGGGCTGGCTCCACGACTCCTCATTTATTCTACCTCTAATCTTGCTAGCGGGATCCCCGATCGGTTTTCAGGCAGTGGTAGCGGGACCGACTTCACCTTGACCATTTCCCGGCTGGAGCCTGAGGACTTCGCTGTATATTACTGCCATCAATACCATAGATCTCCCTATACCTTCGGCCAGGGGACCAAACTGGAGATTAAG	204
hSC34.28	Heavy Chain	CAAGTGCAACTGGTGCAGTCCGGCGCTGAAGTGAAAAAACCCGGATCTTCTGTGAAAGTGAGCTGTAAAGCATCCGGGGGCACATTCAGCAGCTACTGGATCGAATGGGTGCGTCAGGCCCCCGGACAGGGACTGGAATGGATGGGTGAAATCTTGCCTGGTTCCGGCAATACTTACTACAATGAGCGCTTCAAGGATCGAGTCACCATCACCGCTGATGAGTCAACCTCAACTGCTTACATGGAGCTGTCTTCCCTGCGATCTGAGGACACAGCTGTATACTACTGTGCTAGACGGGCAGCCGCTTACTATTCTAACCCAGAGTGGTTCGCTTATTGGGGCCAAGGAACCCTGGTCACAGTGAGTTCT	206
hSC34.38	Light Chain	GACGTCGTCATGACACAGTCCCCCCTGAGCCTCCCTGTGACTCTGGGTCAGCCAGCTTCCATCTCTTGCAAATCTAGCCAGTCCCTCCTGTATAGTAACCGTCGCACCTATCTGAACTGGTTTCAGCAGCGCCCAGGCCAAAGTCCCAGGCGGCTCATCTACCTGGTGTCTAAGTTGGATAGTGGAGTTCCCGATAGGTTTAGTGGATCCGGTTCTGGCACTGATTTCACACTGAAGATTAGTAGGGTCGAGGCAGAAGATGTGGGAGTGTATTACTGTGTGCAGGGGACACATTTTCCTTTTACCTTCGGCCAGGGCACCAAGCTGGAAATCAAG	208
hSC34.38	Heavy Chain	GAGGTGCAGCTTGTCCAATCAGGGGCCGAAGTCAAGAAACCTGGAGAATCTCTGAAGATATCTTGTAAGGGATCCGGTTATTCCTTCACTTCCTATTACATGTACTGGGTGAGACAGATGCCAGGCAAAGGCTTGGAATGGATGGGCGAGATCAACCCCAGCAATGGTGGGGCCAACTTCAACGAGAGATTCAAGAACCAGGTTACTATCTCCGCAGACAAGAGCATATCAACCGCTTACCTTCAGTGGTCTTCCCTTAAGGCATCCGACACCGCTATGTACTACTGCACCCGAGGCCTGCTTTATTACGATTATGATAGAGGTTTTGCTTACTGGGGACAGGGAACATTGGTCACTGTGTCCAGT	210
hSC34.87	Light Chain	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTTTATTAAACAGCCGCACCCGTAAGAACTACTTAGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAGCTGCTCATTTACTGGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTAAGCAATCTTATAATCTGTGGACGTTCGGTGGAGGCACCAAGCTGGAAATCAAA	212
hSC34.87	Heavy Chain	CAGGTCCAGCTTGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCTGGATACACCTTCACTAGCTATTGGATGCTTTGGGTGCGCCAGGCCCCCGGACAAAGGCTTGAGTGGATGGGATACATCGACCCTAGAAATGGTTACACAGAATATAATCAGAAGTTCAAGGACAGAGTCACCATTACCAGGGACACATCCGCGAGCACAGCCTACATGGAGCTGAGCAGCCTGAGATCTGAAGACACGGCTGTGTATTACTGTGCGAGAGGGGGGAATGTGGCTATGGACTACTGGGGTCAAGGAACCCTAGTCACCGTCTCGAGT	214

FIG. 5C Cont.

Anti-DPEP3 Humanized Full Length Amino Acid Sequences

Name	Chain	Full Sequence	SEQ ID NO
hSC34.2	Light Chain	DIQMTQSPSSLSASVGDRVTITCSASQGITNYLNWYQQKPGKAPKLLIYYTSRLHSGVPSRFSGSGSGTDFTLTISSLQPEDFATYYCQQYSKLPWTFGQGTKVEIKRTV AAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	216
hSC34.2	Heavy Chain	EVQLVQSGAEVKKPGESLKISCKGSGYSFTDYYINWVRQMPGKGLEWMGWTYPGSGPTKYNGKFRGQVTISADKSISTAYLQWSSLKASDTAMYYCARRGIYYYDGIYPN YFDYWGQGTTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVD KKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCK VSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSLSPG	217
hSC34.11	Light Chain	DIQMTQSPSSLSASVGDRVTITCKSSQSLLNSRTRKNYLAWYQQKPGKVPKLLIYWASTRESGVPSRFSGSGSGTDFTLTISSLQPEDVATYYCKESYNLWTFGGGTKVE IKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	218
hSC34.11	Heavy Chain	EVQLVQSGAEVKKPGESLKISCKGSGYSFTNYWMIWVRQMPGKGLEWMGYIDPTTDYTAYNQKFKDQVTISADKSISTAYLQWSSLKASDTAMYYCARGGNVALDFWGQG TLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSC DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPG	219
hSC34.14	Light Chain	DIQMTQSPSSLSASVGDRVTITCRTSEHIYSYLAWYQQKPGKAPKLLIYNAKTLAEGVPSRFSGSGSGTDFTLTISSLQPEDFATYYCQHHYDTPYTFGQGTKLEIKRTV AAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	220
hSC34.14	Heavy Chain	QVQLVQSGAEVKKPGASVKVSCKASGYTFTDYYMHWVRQAPGQRLEWMGRVNPKKGGTTYNQKFEGRVTITRDTSASTAYMELSSLRSEDTAVYYCAMGIYYSYDASFDY WGQGTTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVE PKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHY TQKSLSLSPG	221
hSC34.25	Light Chain	DIVMTQSPDSLAVSLGERATINCKSSQSLLYSRYQKNYVAWYQQKPGQPPKLLIYWASTRESGVPDRFSGSGSGTDFTLTISSLQAEDVAVYYCQQYYRYPLTFGQGTKL EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	222
hSC34.25	Heavy Chain	QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYAISWVRQAPGQRLEWMGEIYPGSGETYYNEKFKGRVTITRDTSASTAYMELSSLRSEDTAVYYCARVNDYGSWFPYWG QGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPK SCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQ KSLSLSPG	223

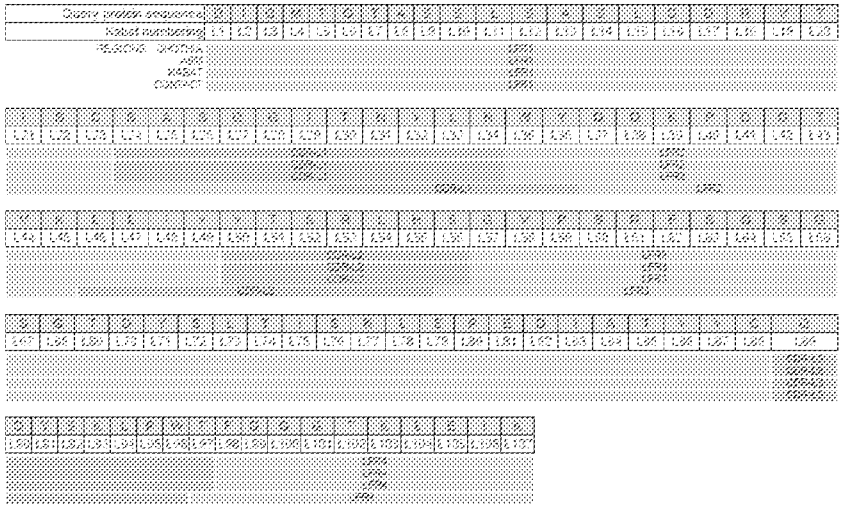
FIG. 5D

Anti-DPEP3 Humanized Full Length Amino Acid Sequences

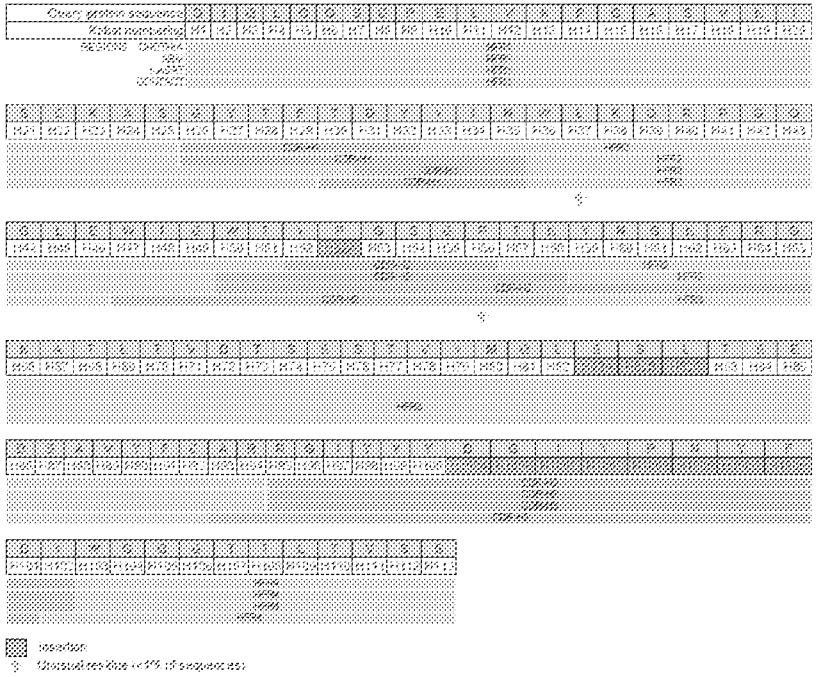
Name	Chain	Full Sequence	SEQ ID NO
hSC34.28	Light Chain	EIVLTQSPATLSLSPGERATLSCTASSSVNSFYLHWYQQKPGLAPRLLIYSTSNLASGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCHQYHRSPYTFGQGTKLEIKRT VAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	224
hSC34.28	Heavy Chain	QVQLVQSGAEVKKPGSSVKVSCKASGGTFSSYWIEWVRQAPGQGLEWMGEILPGSGNTYYNERFKDRVTITADESTSTAYMELSSLRSEDTAVYYCARRAAAYYSNPEWF AYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKK VEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVS NKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPG	225
hSC34.28ss1	Heavy Chain	QVQLVQSGAEVKKPGSSVKVSCKASGGTFSSYWIEWVRQAPGQGLEWMGEILPGSGNTYYNERFKDRVTITADESTSTAYMELSSLRSEDTAVYYCARRAAAYYSNPEWF AYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKK VEPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVS NKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPG	226
hSC34.38	Light Chain	DVVMTQSPLSLPVTLGQPASISCKSSQSLLYSNRRTYLNWFQQRPGQSPRRLIYLVSKLDSGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCVQGTHFPFTFGQGTKLE IKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	227
hSC34.38	Heavy Chain	EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYYMYWVRQMPGKGLEWMGEINPSNGGANFNERFKNQVTISADKSISTAYLQWSSLKASDTAMYYCTRGLLYYDYDRGFA YWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKV EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSN KALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNH YTQKSLSLSPG	228
hSC34.87	Light Chain	DIVMTQSPDSLAVSLGERATINCKSSQSLLNSRTRKNYLAWYQQKPGQPPKLLIYWASTRESGVPDRFSGSGSGTDFTLTISSLQAEDVAVYYCKQSYNLWTFGGGTKLE IKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	229
hSC34.87	Heavy Chain	QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYWMLWVRQAPGQRLEWMGYIDPRNGYTEYNQKFKDRVTITRDTSASTAYMELSSLRSEDTAVYYCARGGNVAMDYWGQG TLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSC DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPG	230

FIG. 5D Cont.

CDRs of SC34.2 Light and Heavy Chain Variable Regions



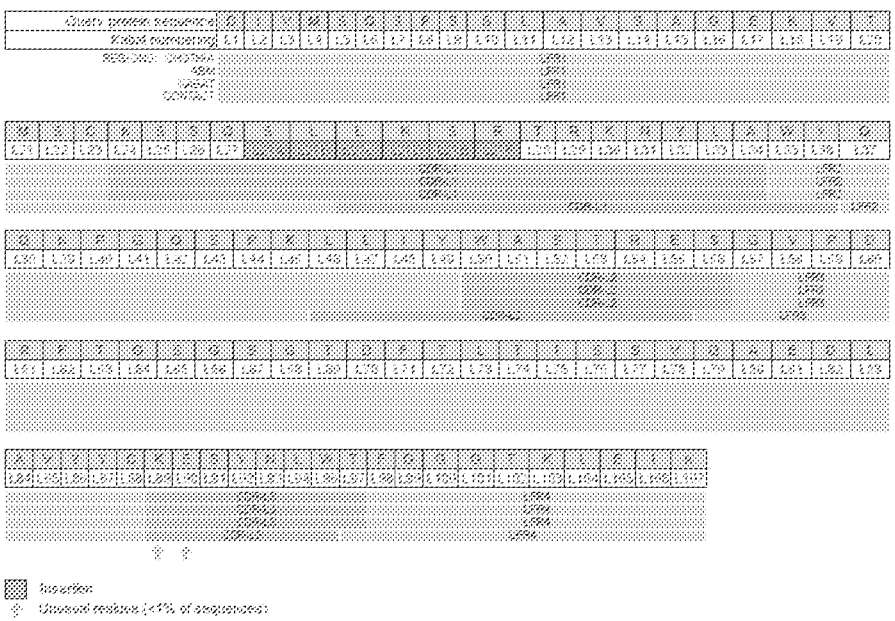
Light Chain



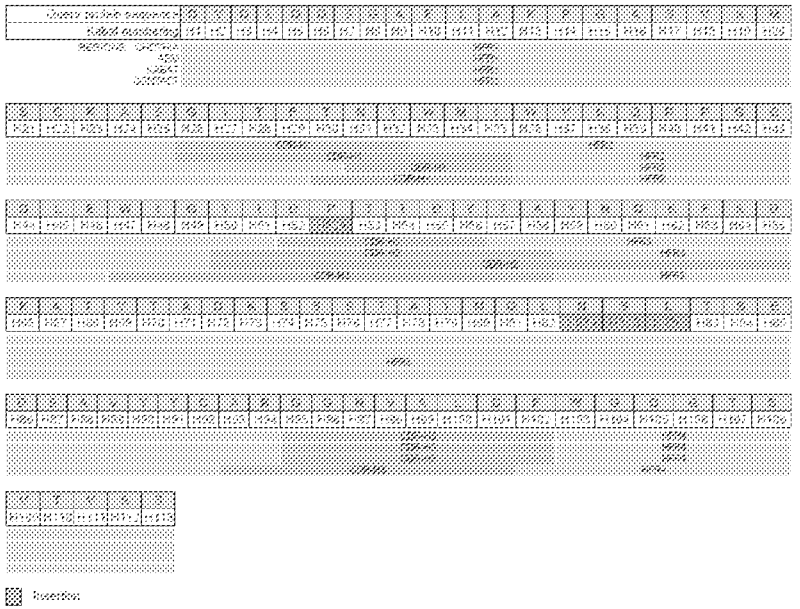
Heavy Chain

FIG. 5E

CDRs of SC34.11 Light and Heavy Chain Variable Regions



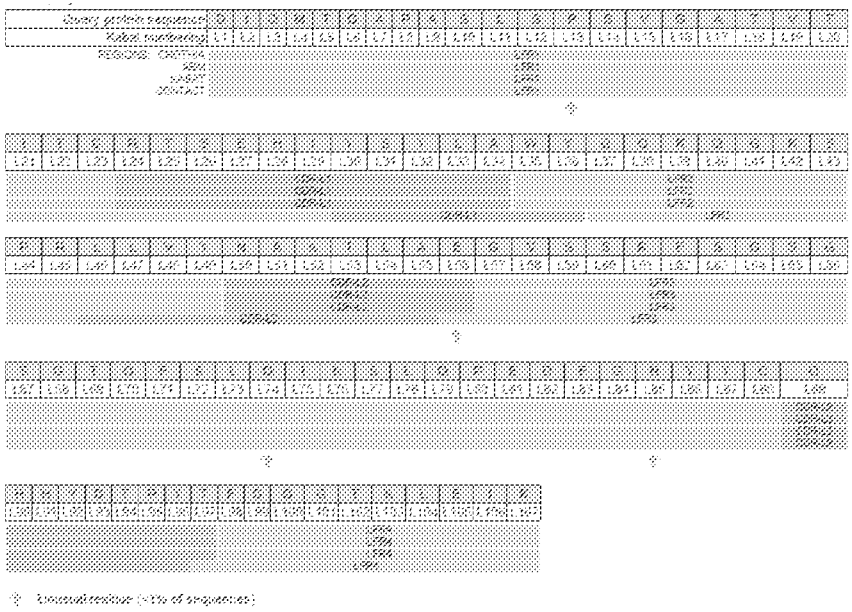
Light Chain



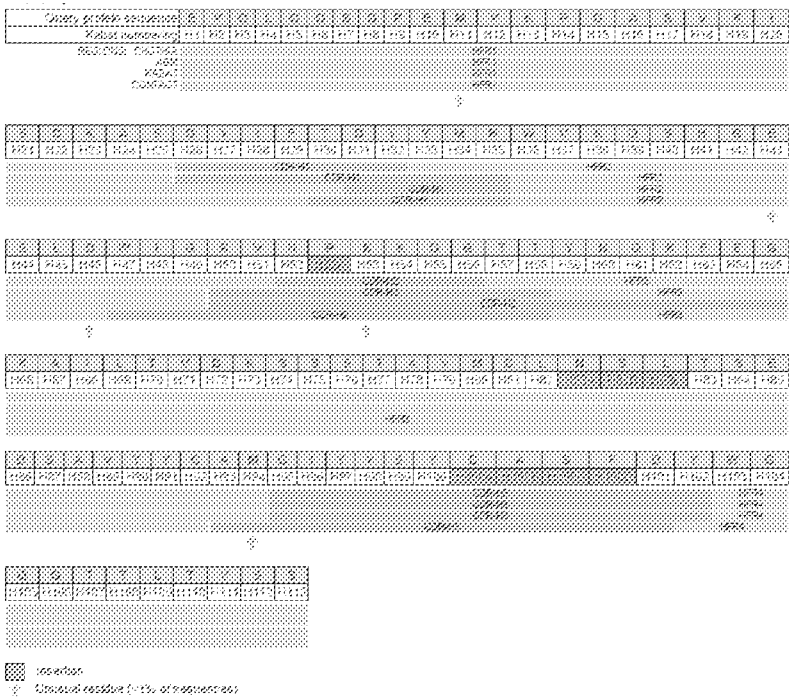
Heavy Chain

FIG. 5F

CDRs of SC34.14 Light and Heavy Chain Variable Regions



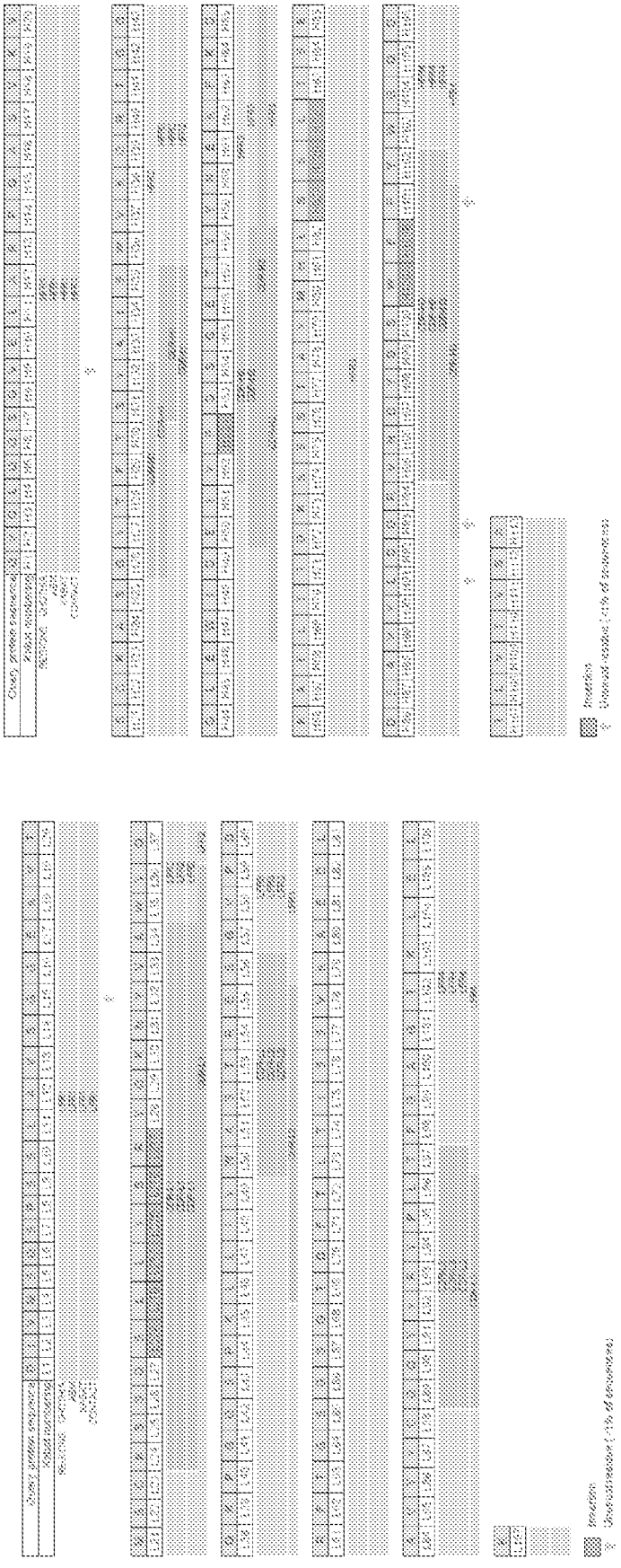
Light Chain



Heavy Chain

FIG. 5G

CDRs of SC34.25 Light and Heavy Chain Variable Regions

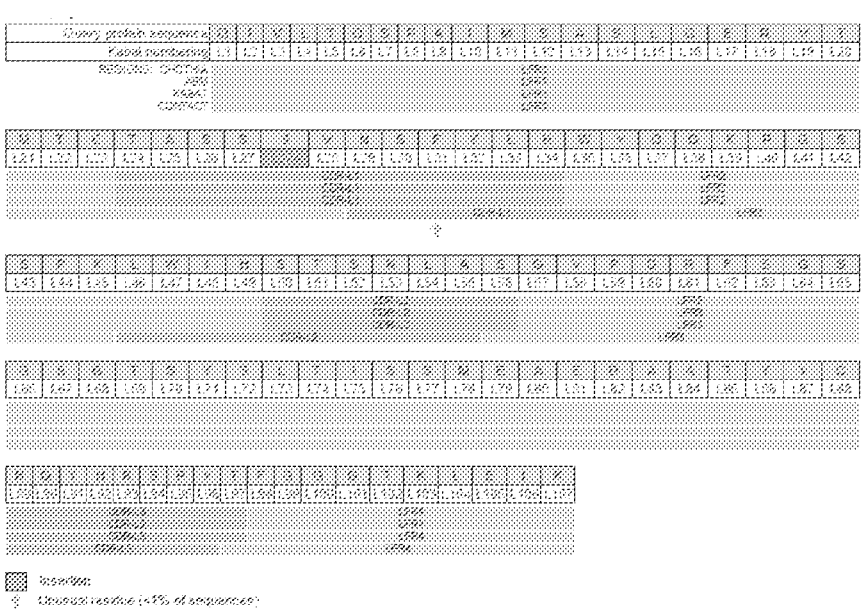


Light Chain

Heavy Chain

FIG. 5H

CDRs of SC34.28 Light and Heavy Chain Variable Regions



Light Chain



Heavy Chain

FIG. 5I

CDRs of SC34.38 Light and Heavy Chain Variable Regions



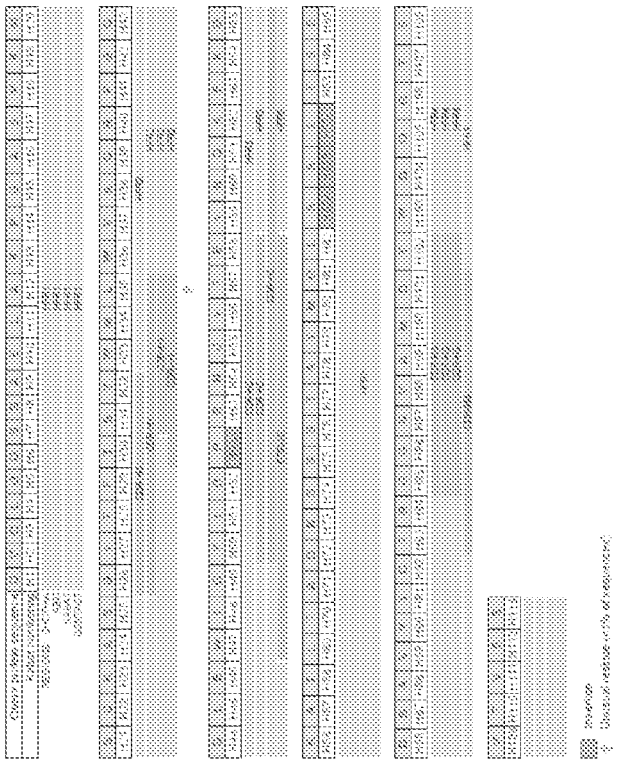
Light Chain



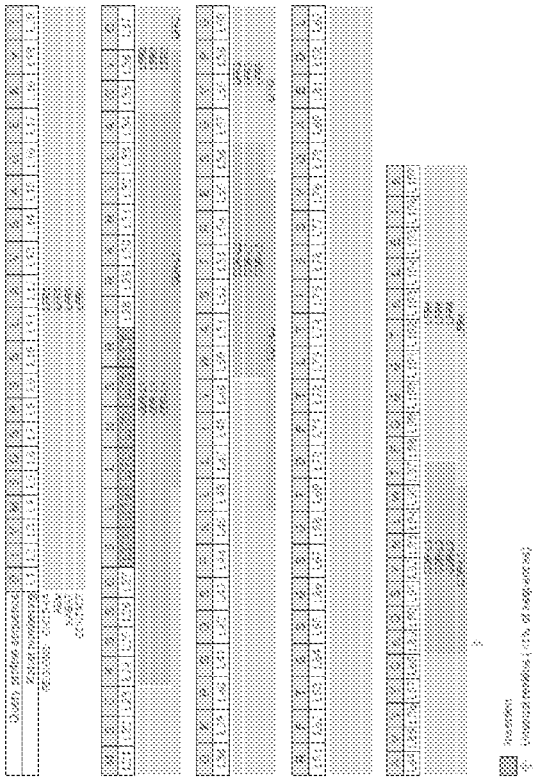
Heavy Chain

FIG. 5J

CDRs of SC34.87 Light and Heavy Chain Variable Regions



Heavy Chain



Light Chain

FIG. 5K

Protein Expression of DPEP3 in PDX Tumors

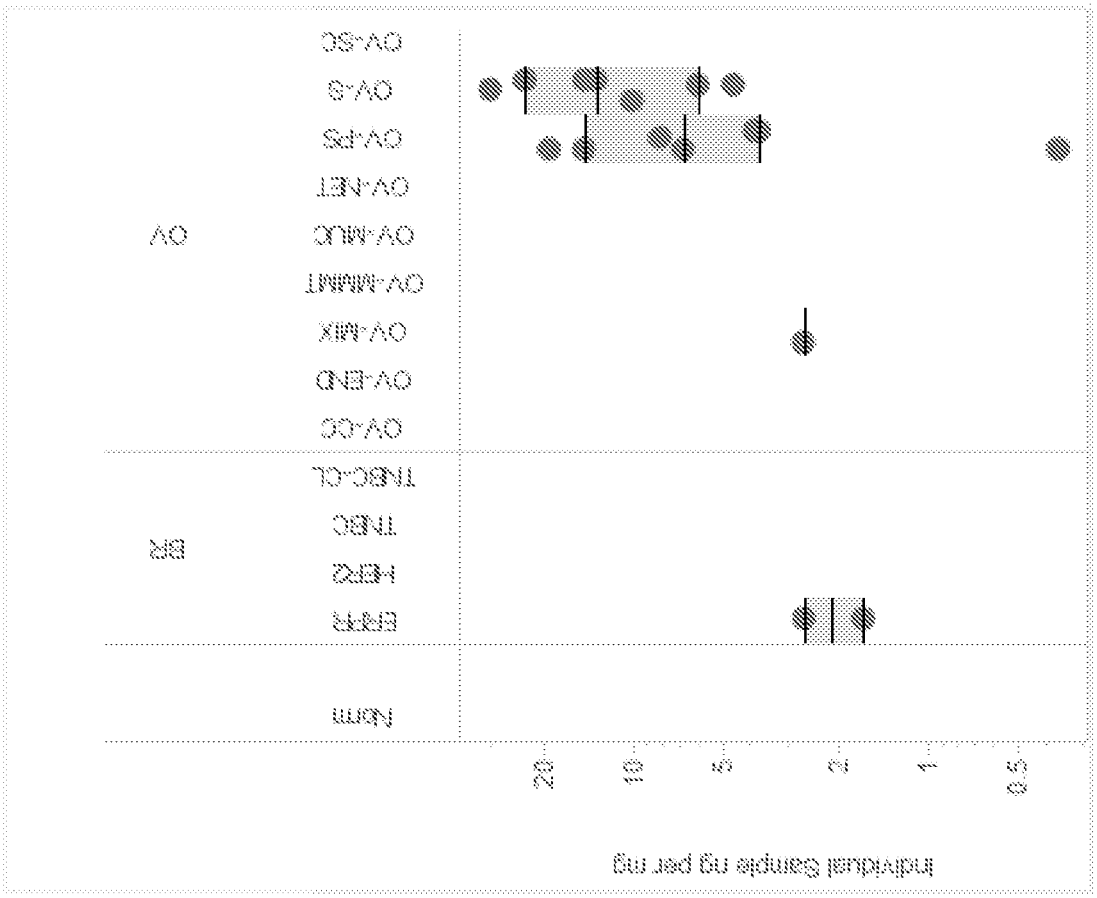


FIG. 6

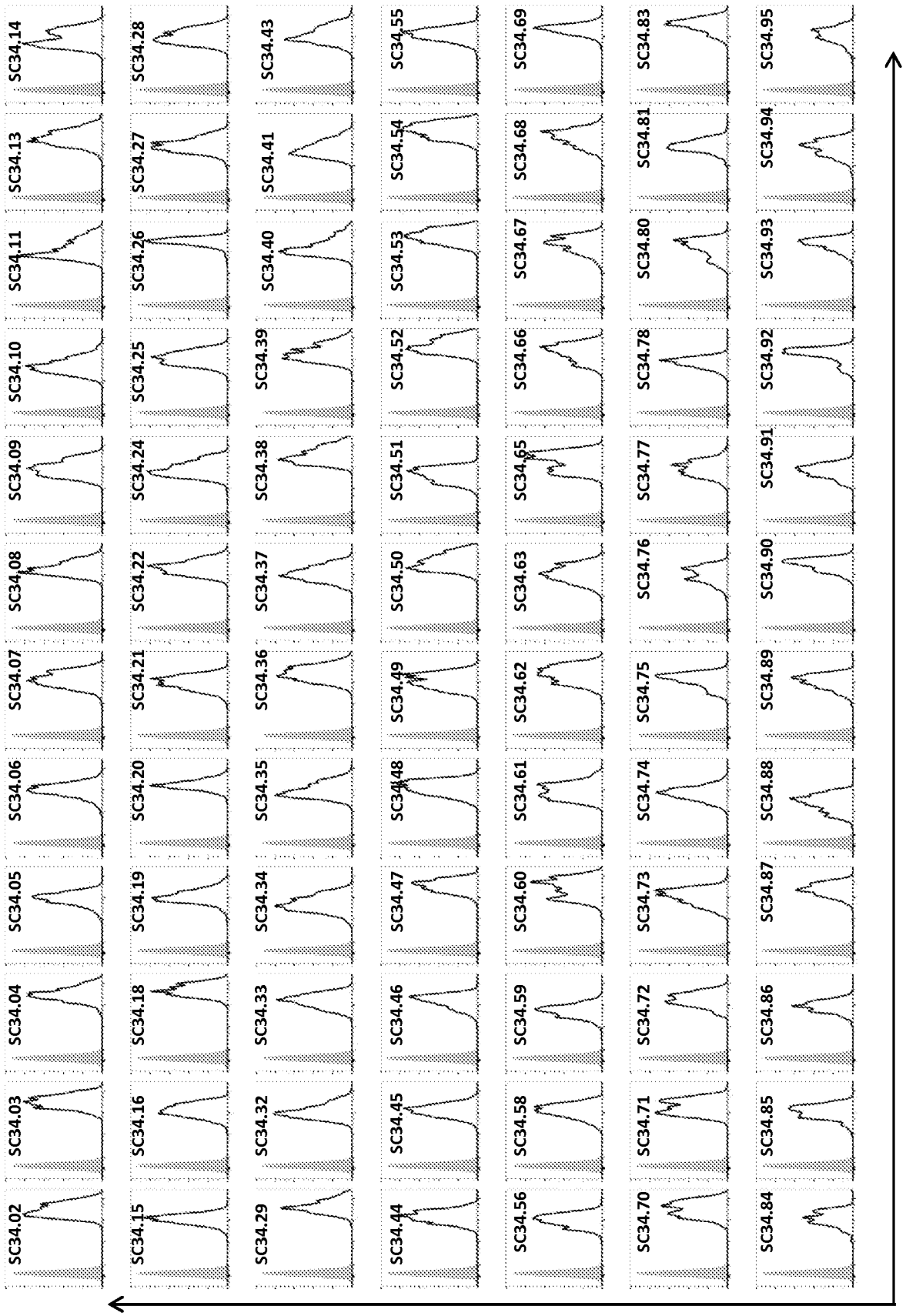
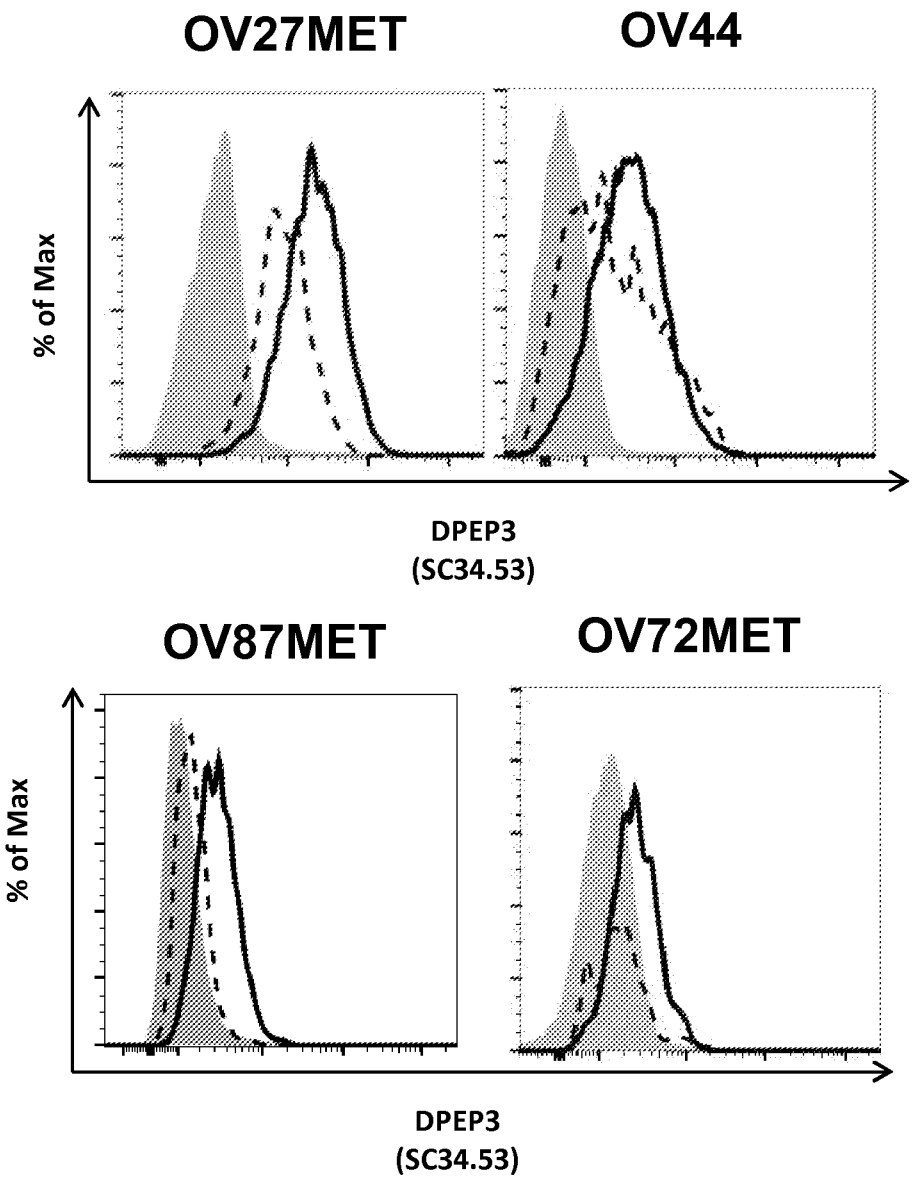

Anti-DPEP3 Antibodies Detect DPEP3 by Flow Cytometry in Cells Overexpressing DPEP3
SC34.02 SC34.03 SC34.04 SC34.05 SC34.06 SC34.07 SC34.08 SC34.09 SC34.10 SC34.11 SC34.13 SC34.14
SC34.15 SC34.16 SC34.18 SC34.19 SC34.20 SC34.21 SC34.22 SC34.24 SC34.25 SC34.26 SC34.27 SC34.28
SC34.29 SC34.32 SC34.33 SC34.34 SC34.35 SC34.36 SC34.37 SC34.38 SC34.39 SC34.40 SC34.41 SC34.43
SC34.44 SC34.45 SC34.46 SC34.47 SC34.48 SC34.49 SC34.50 SC34.51 SC34.52 SC34.53 SC34.54 SC34.55
SC34.56 SC34.58 SC34.59 SC34.60 SC34.61 SC34.62 SC34.63 SC34.65 SC34.66 SC34.67 SC34.68 SC34.69
SC34.70 SC34.71 SC34.72 SC34.73 SC34.74 SC34.75 SC34.76 SC34.77 SC34.78 SC34.80 SC34.81 SC34.83
SC34.84 SC34.85 SC34.86 SC34.87 SC34.88 SC34.89 SC34.90 SC34.91 SC34.92 SC34.93 SC34.94 SC34.95
% of Max
DPEP3 (SC34.xx)

FIG. 7A

Anti-DPEP3 Antibodies Detect Tumor Initiating Cells in OV-S PDX Tumors



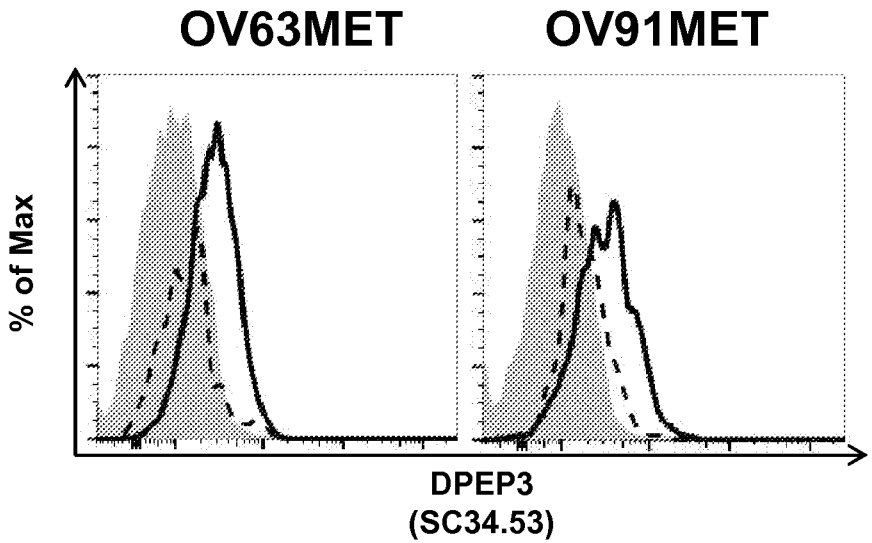


ΔMFI

PDX	NTG	TIC
OV27 MET	670	1525
OV44	442	713
OV72 MET	63	228
OV87MET	66	245

FIG. 7B

Anti-DPEP3 Antibodies Detect Tumor Initiating Cells in OV-PS PDX Tumors



———	TIC
- - - - -	NTG
.....	IgG1 Isotype

ΔMFI

PDX	NTG	TIC
OV63 MET	73	140
OV91 MET	123	275

FIG. 7C

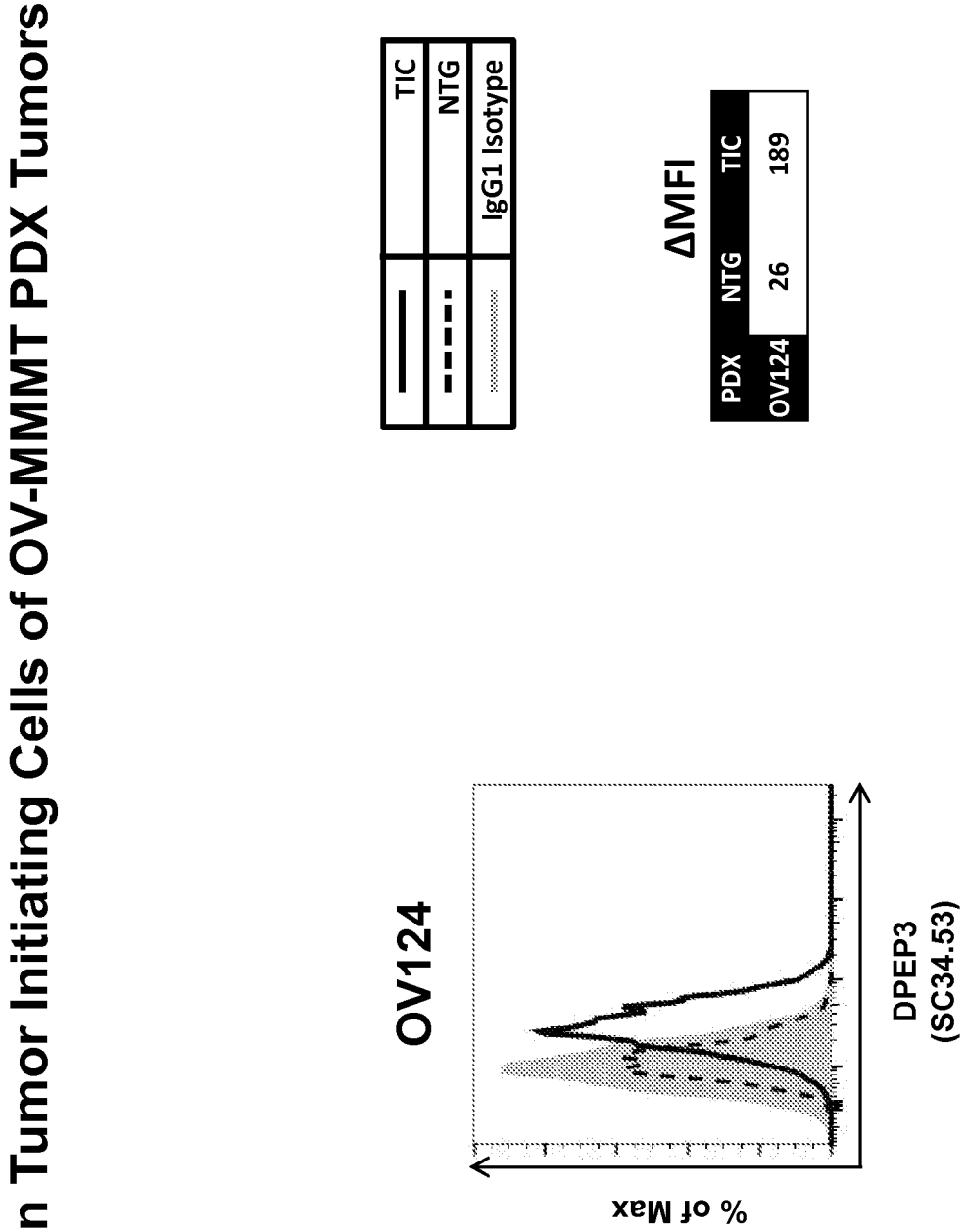

DPEP3 is Expressed in Tumor Initiating Cells of OV-MMMT PDX Tumors
TIC
NTG
IgG1 Isotype
ΔMFI
PDX
NTG
TIC
OV124
26
189
OV124
% of Max
DPEP3
(SC34.53)

FIG. 7D

Anti-DPEP3 Antibodies Detect DPEP3 protein on an Ovarian Cancer Tissue Microarray using Immunohistochemistry

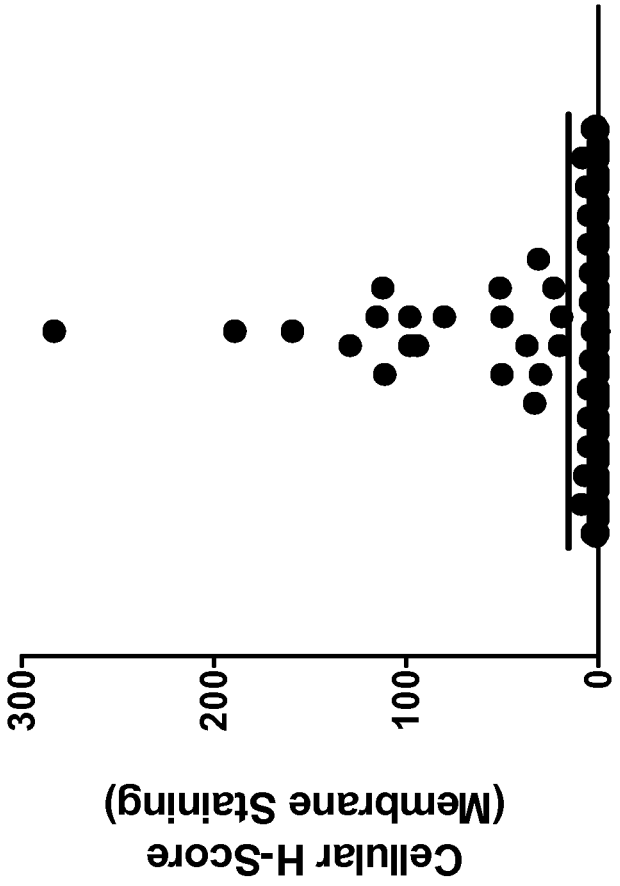


FIG. 8A

DPEP3 RNA Expression Determined by *In Situ* Hybridization on an Ovarian Cancer Tissue Microarray

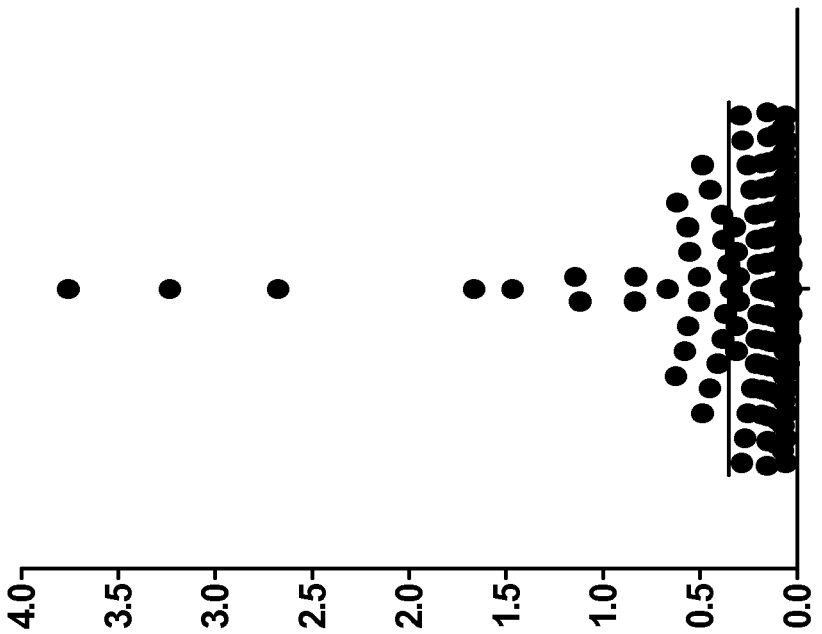


FIG. 8B

***In Vitro* Killing of HEK-293T Cells Overexpressing DPEP3 with Anti-DPEP3-Saporin Antibody Drug Conjugates**

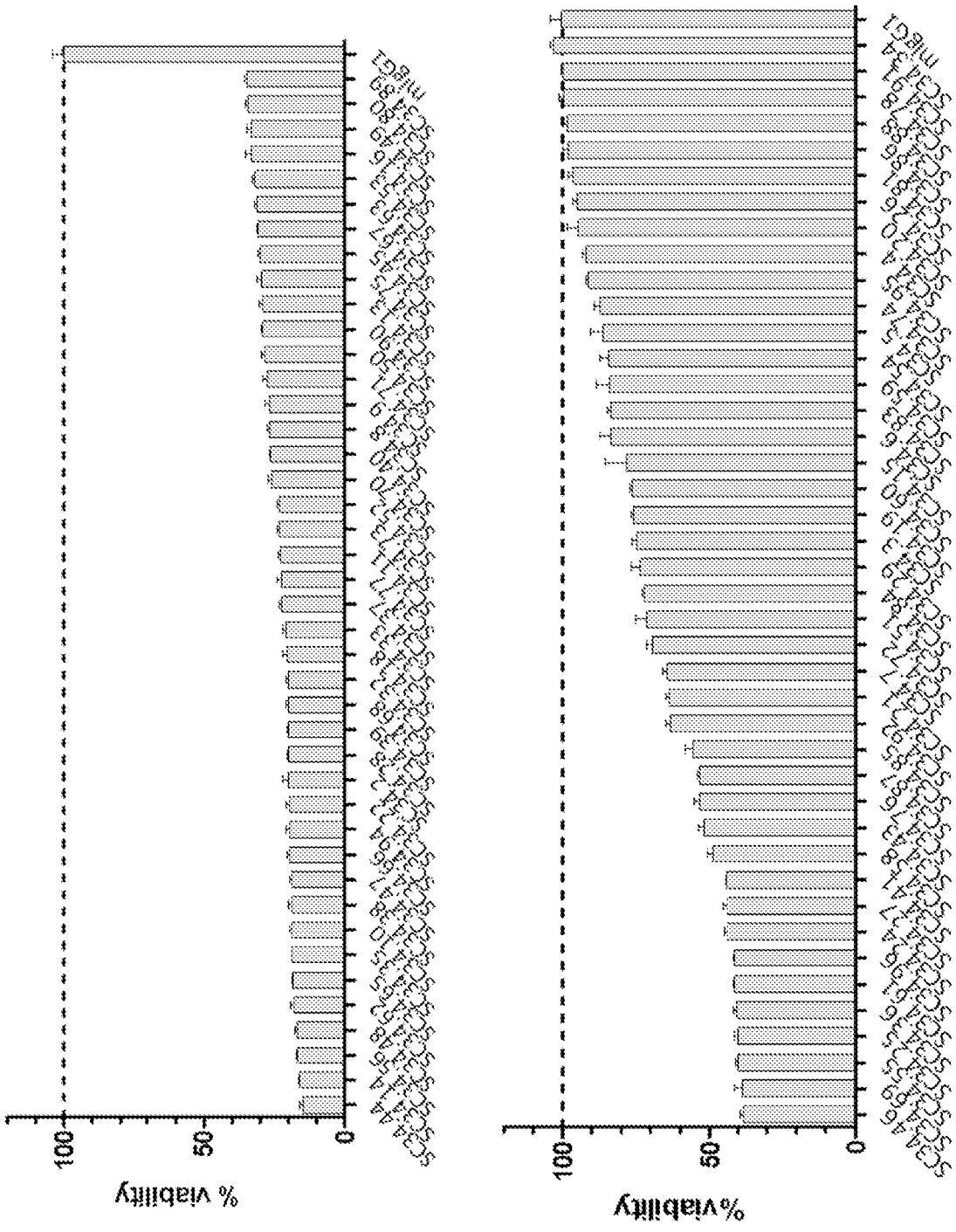


FIG. 9

RP-HPLC Analysis of Anti-DPEP3 Site Specific ADCs

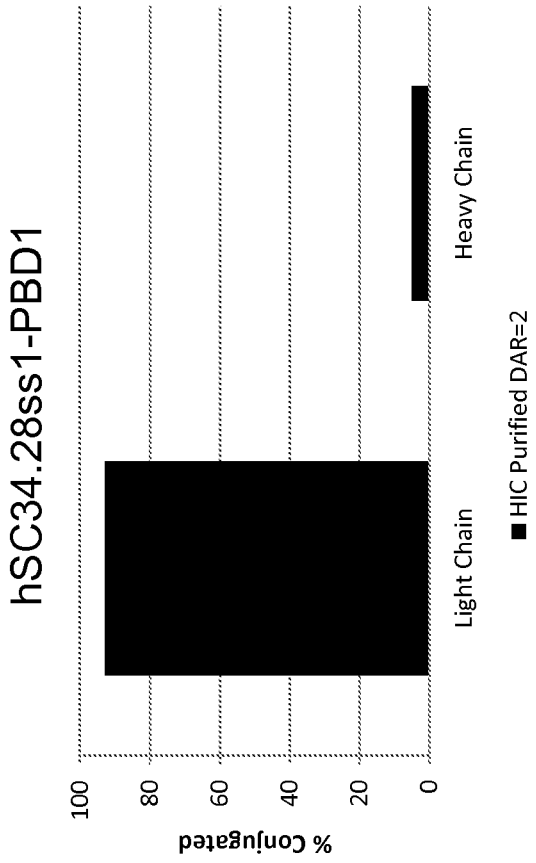


FIG. 10A

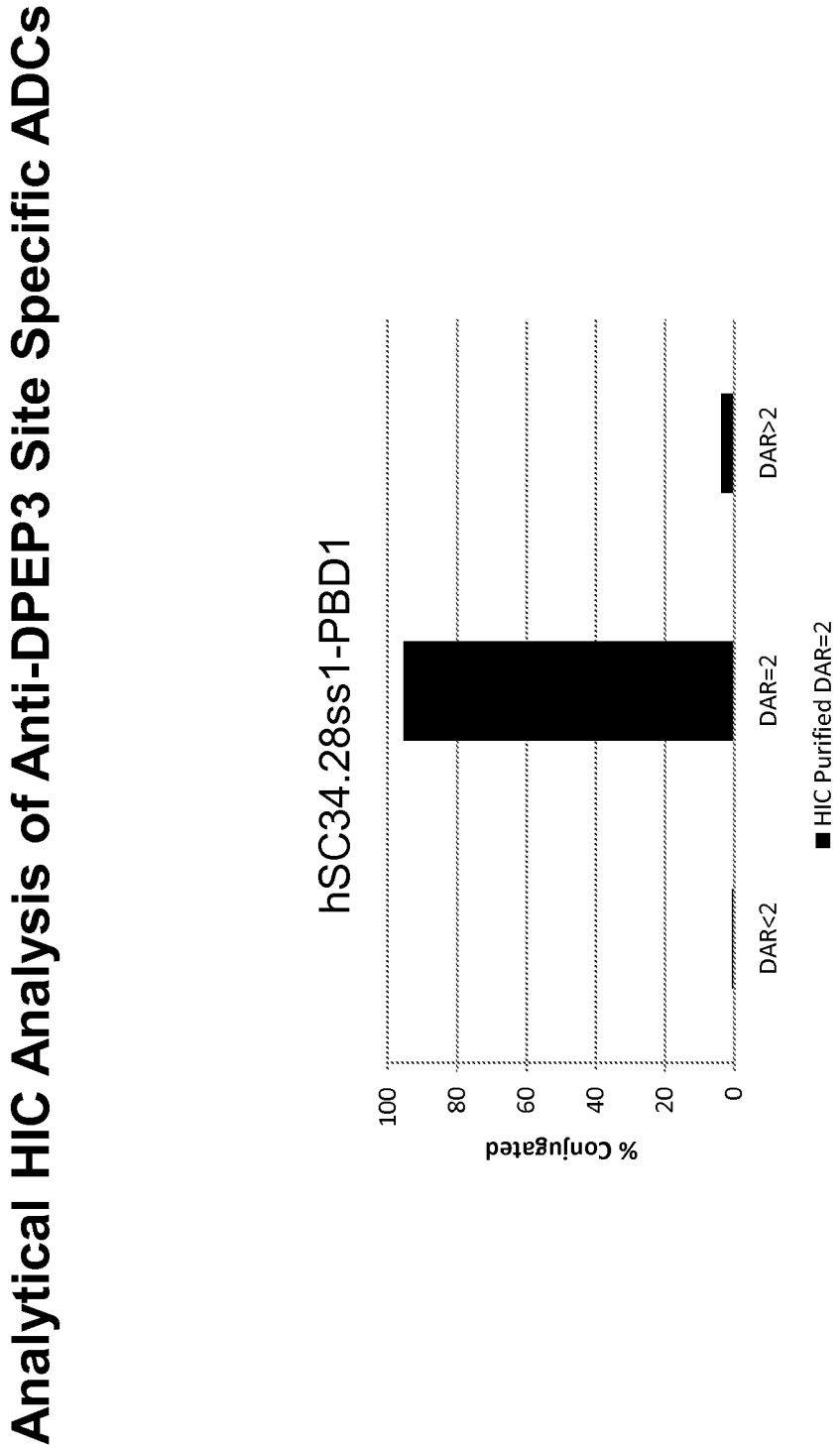

Analytical HIC Analysis of Anti-DPEP3 Site Specific ADCs
hSC34.28ss1-PBD1
% Conjugated
100
80
60
40
20
0
DAR<2
DAR=2
DAR>2
HIC Purified DAR=2

FIG. 10B

***In Vitro* Killing of HEK-293T Cells Overexpressing DPEP3 with Anti-DPEP3 Antibody Drug Conjugates**

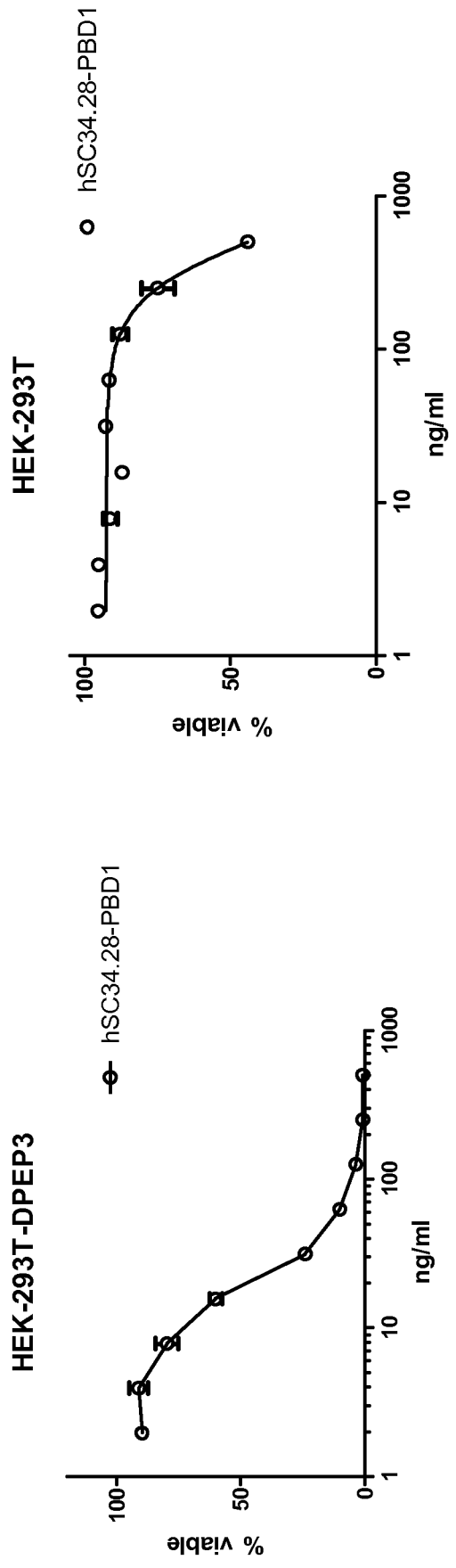


FIG. 11

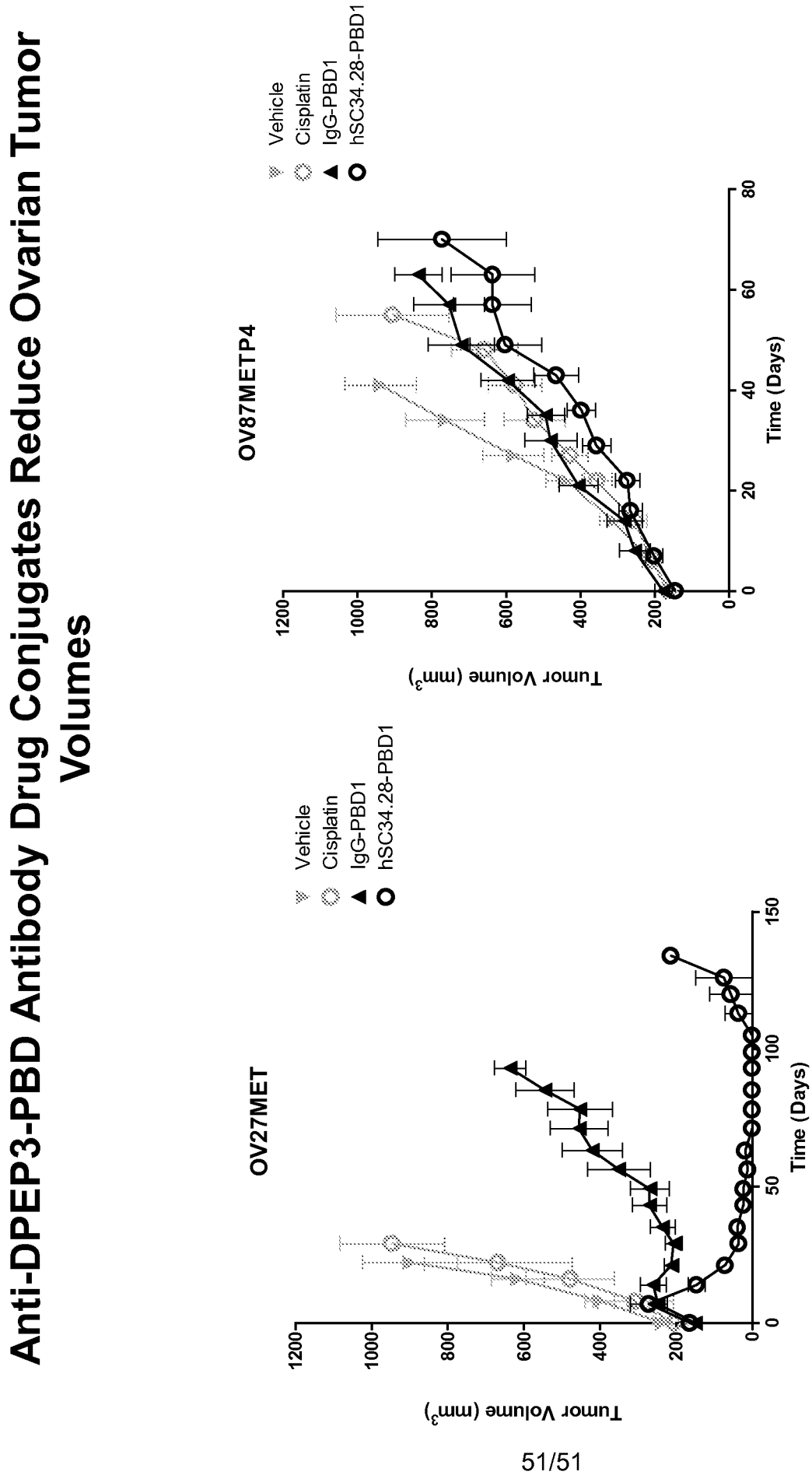

Anti-DPEP3-PBD Antibody Drug Conjugates Reduce Ovarian Tumor Volumes
OV27MET
OV87METP4
Vehicle
Cisplatin
IgG-PBD1
hSC34.28-PBD1
Tumor Volume (mm3)
Time (Days)
0
200
400
600
800
1000
1200
50
100
150
20
40
60
80

FIG. 12