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1	MEPLRLLLLVTELSGAHNTTVEQGVAGQSLQVSCPYPD ^{SMKHWGRRKAWCRQLGEKGPC}	60
	+ PL LL+LLF + + V Q VAGQ+L V C Y +K WC++ C	
6	LHPLLLLLLLFP ^{GSQAQS-KAQVLQSVAGQTLTVRCQYPPTGSLYEKKGWCKEASAL-VC}	63
61	QRVSTHNLWLLSFLRRWNGSTAITDDTLGGTLTITLRNLQPHDAGLYQCQSLHGSEADT	120
	R+V++ ++ W I DD G T+T+ +L+ D+G Y C+ S+	
64	IRLVTS ^{SSKPR} TMA-----WTSRFTIWDDPDAGFFTVTMTDLREEDSGHYWCRIYRPSDNSV	119
121	LRKVLVEVLADP 132 <u>TREM-2 Human</u>	
	+ V ++ P	
120	SKSVRFYLVVSP 131 NCTR2_HUMAN	

FIG. 1A

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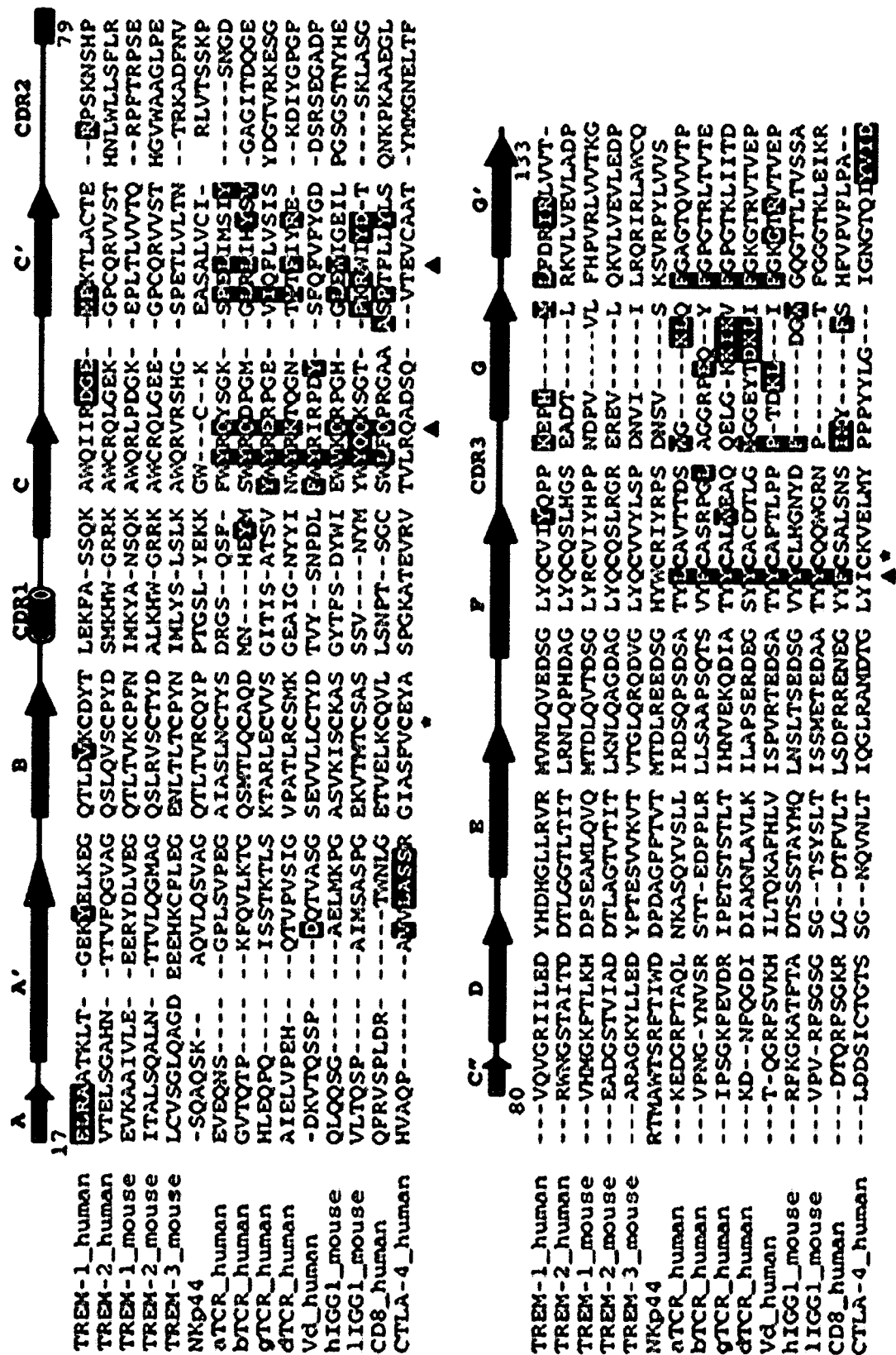


FIG. 1B

sp|Q9NZC2|TREM2_HUMAN Triggering receptor expressed on myeloid cells 2 OS=Homo sapiens GN=TREM2 PE=1 SV=1
Sequence ID: lc|j35715 Length: 230 Number of Matches: 1
Range 1: 6 to 110

Score	Expect	Method	Identities	Positives	Gaps	Frame
42.7 bits(99)	1e-09()	Compositional matrix adjust.	34/107(32%)	49/107(45%)	4/107(3%)	
Features:						
TREM1	9	LLWMLFVSELRAATKLTTEEKYELKEGQTLDVKCDYTLKFASSQKAW--QIIRDGEMPKT				66
		LL +LPV+BL A T ++ GQ+L V C Y K +KAN Q+ G +				
TREM2	6	LLILLFVTELSGAHNTT--VFQGVAGQSLQVSCPYDSMKHWGRRKAWCRQLGEKGPCQRV				63
TREM1	67	LACTERPSKNSHPVQVGRIILEDYHDHGLLRVRMVNLQVEDSGLYQC				113
		++ + G + D G L + + NLO D+GLYQC				
TREM2	64	VSTHHLWLLSFLRRWNGSTAITDDTLGGTTLTITLRNLQPHDAGLYQC				110

FIG. 2A

Ab21
 EVQLVQSGAEVKKPGESLKISCKGSGYSFTTYWIGWVRQMPGKGLEWMGIHYPGDSDTRYSPSEQQVVTISADKSISTAYLQWSSLKASDTAMYYC
ARAGHYDGGHLGMDVWGQGTTVVSS (SEQ ID NO:414)

Ab52
 QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYIHWVRQAPGQGLEWMGIINPSGGSTSYAQKFOGRVTMTTRDTSTSTVYMESSLRSEDTAVYY
CAREADDSSGYPLGLDVWGQGTMVTVSS (SEQ ID NO:415)

FIG. 2B

Ab21
 EIVMTQSPGTLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYGASNRAIGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQDDSA
PYTFGGTKVEIK (SEQ ID NO:416)

Ab52
 EIVMTQSPATLSVSPGERATLSCRASQSVSSNLAWYQQKPGQAPRLLIYGASTRATGIPARFSGSGSGTEFTLTISLQSEDFAVYYCQQVNSLPPTFG
GGTKVEIK (SEQ ID NO:417)

FIG. 2C

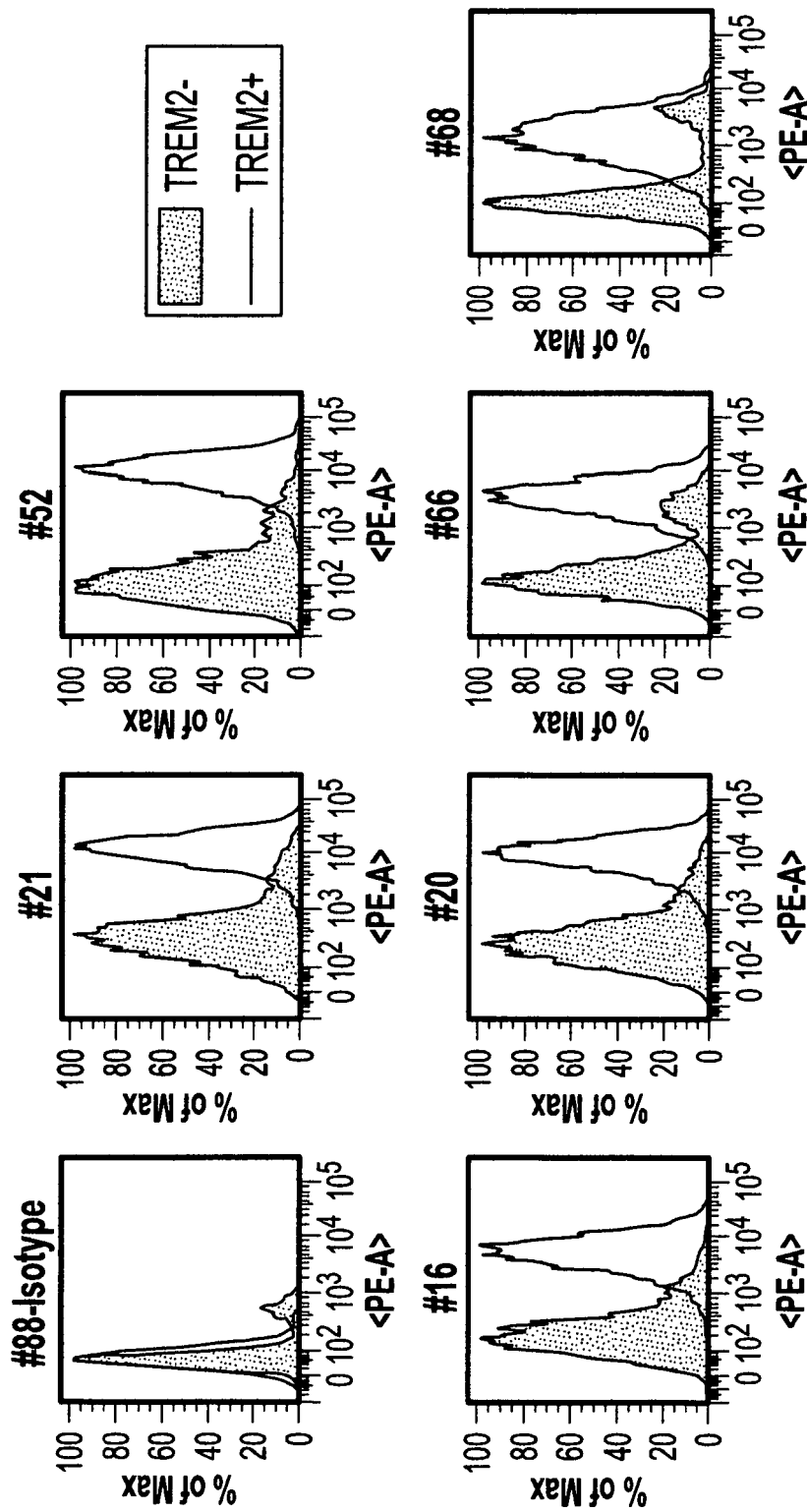


FIG. 3A

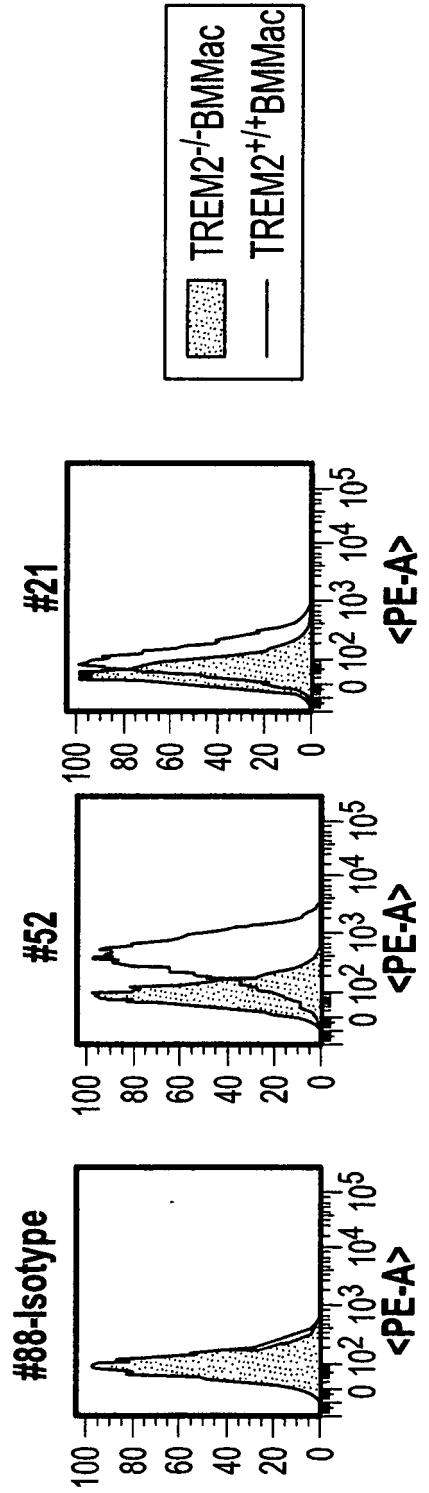


FIG. 3B

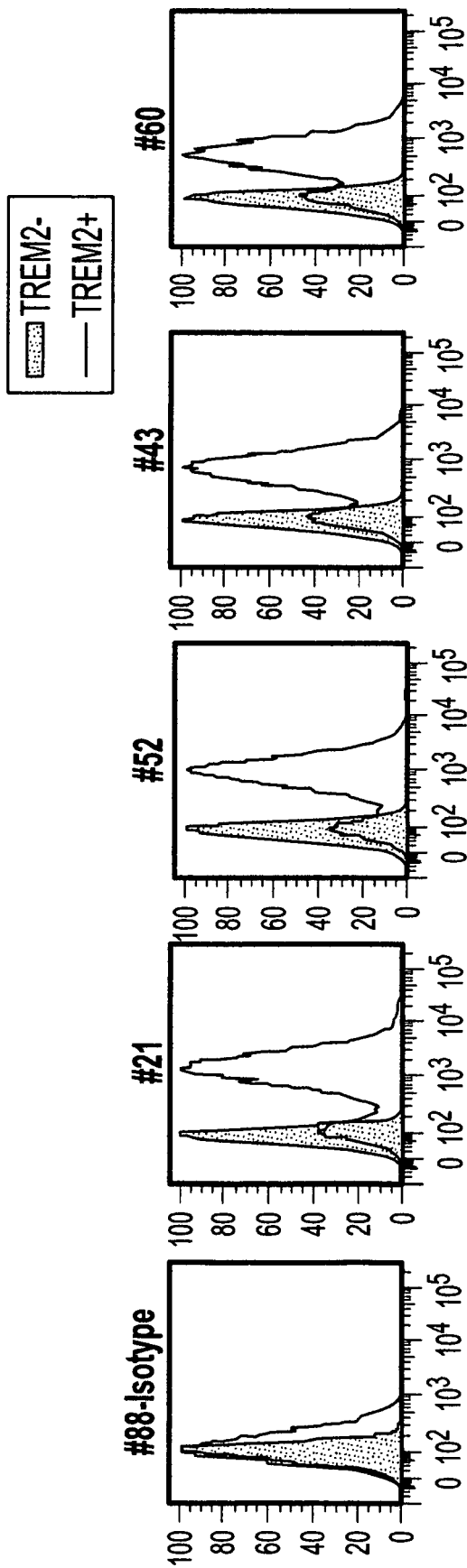


FIG. 4A

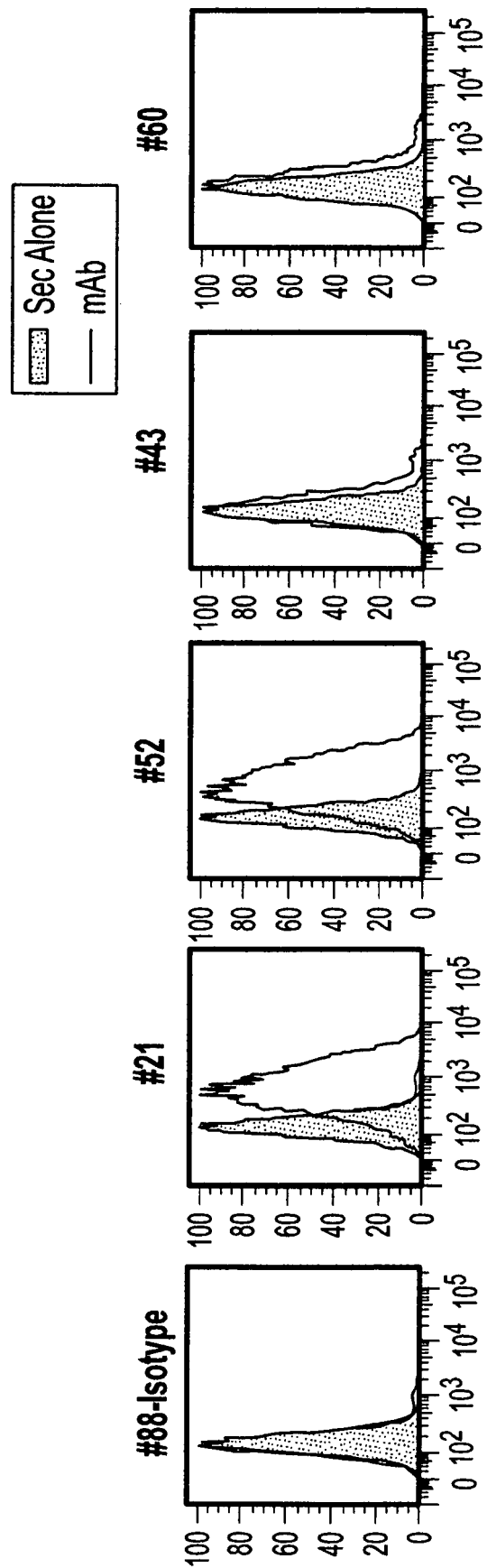


FIG. 4B

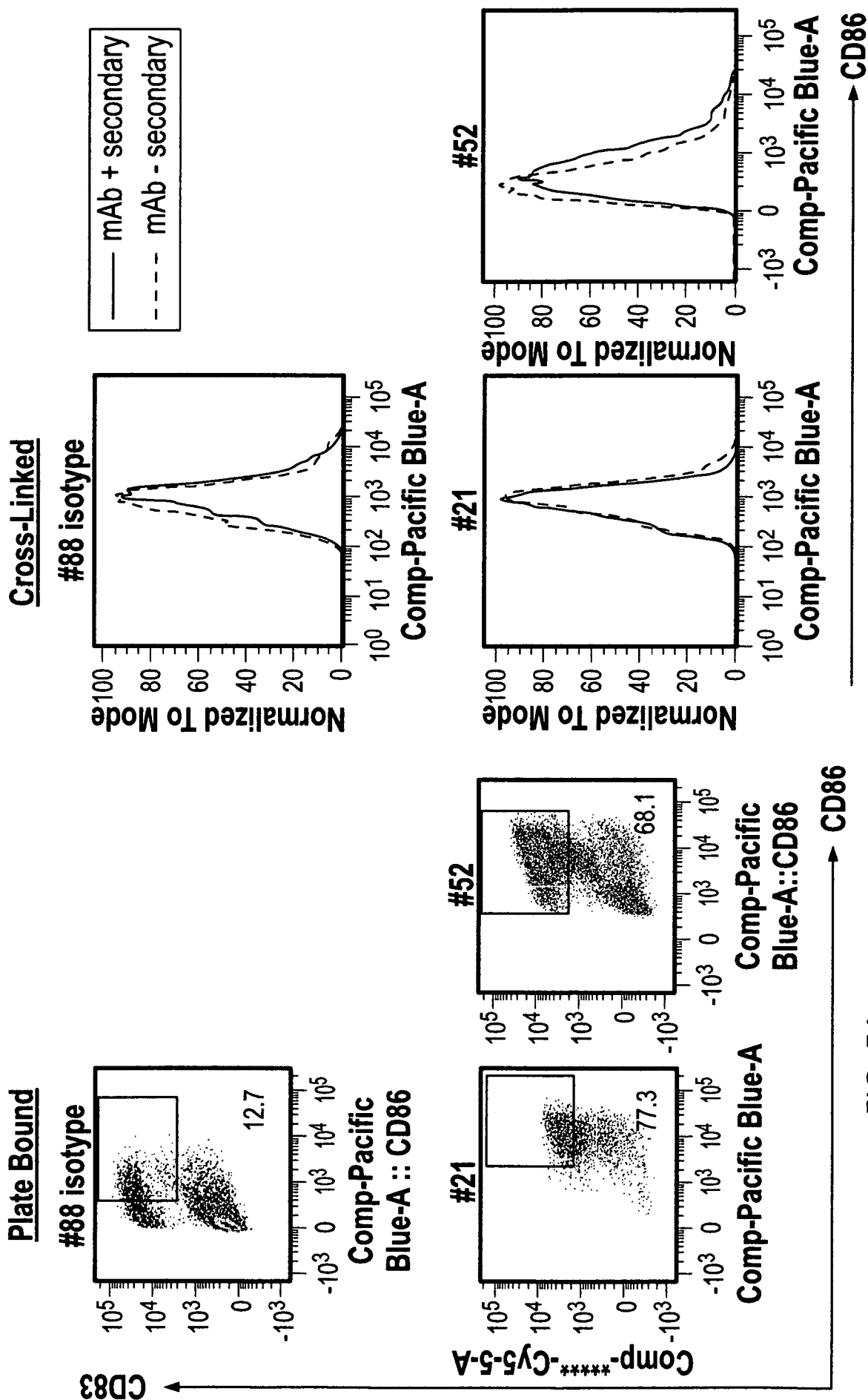
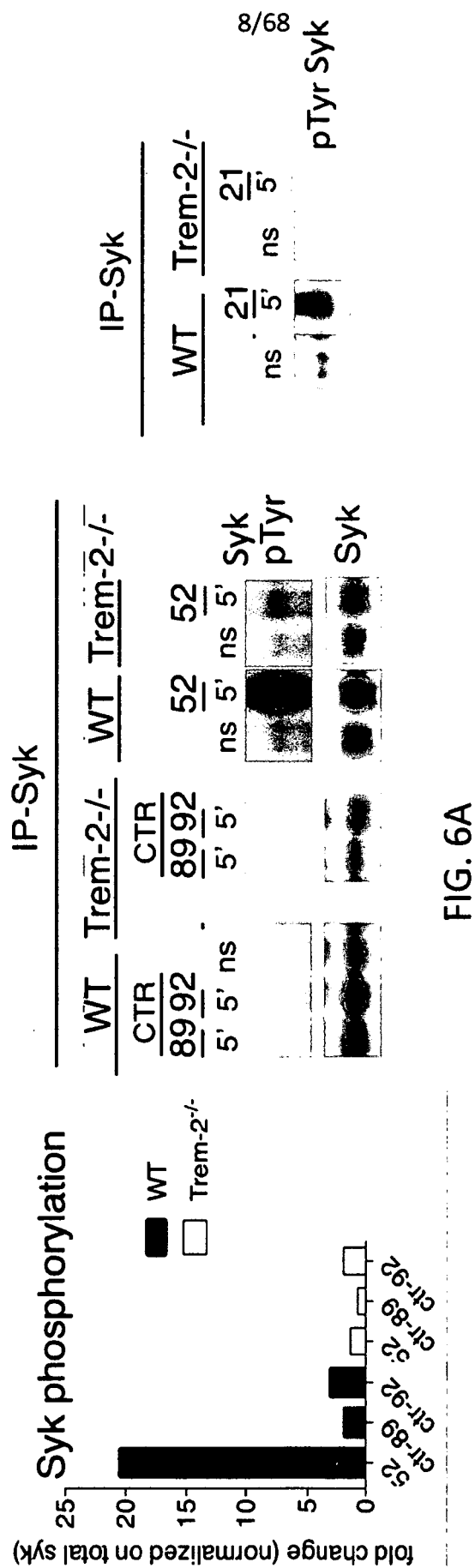


FIG. 5B

FIG. 5A



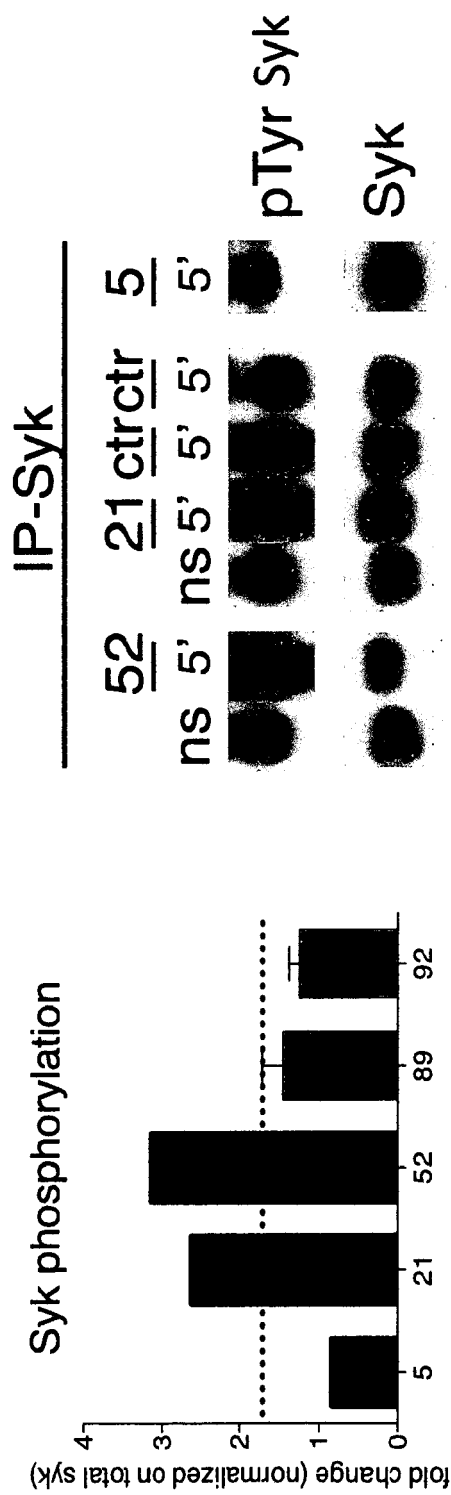


FIG. 6B



FIG. 7A

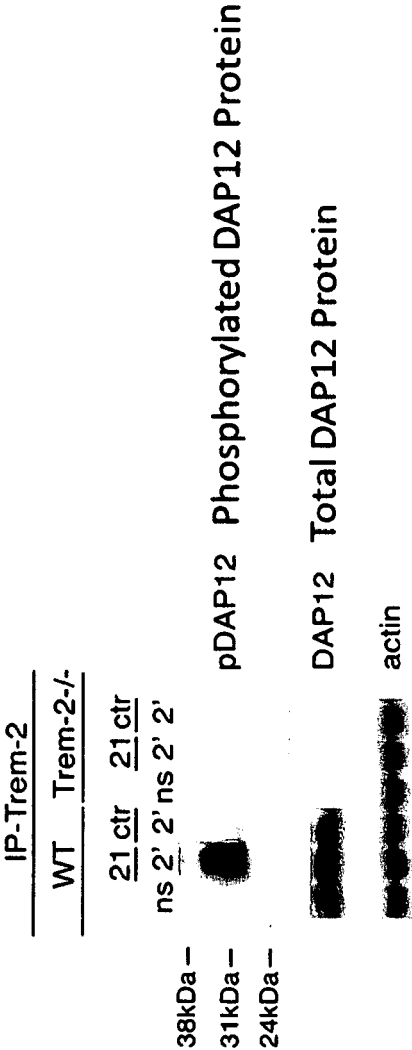


FIG. 7B

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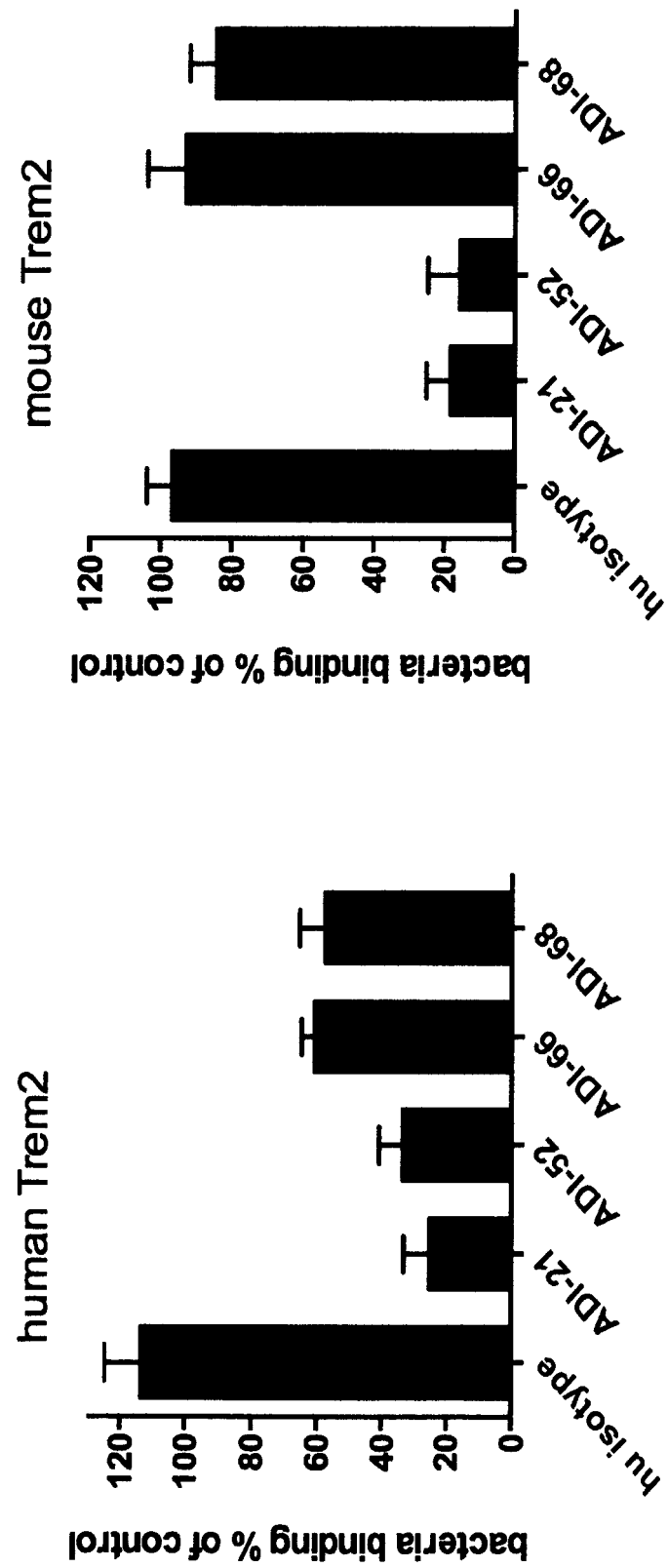


FIG. 8

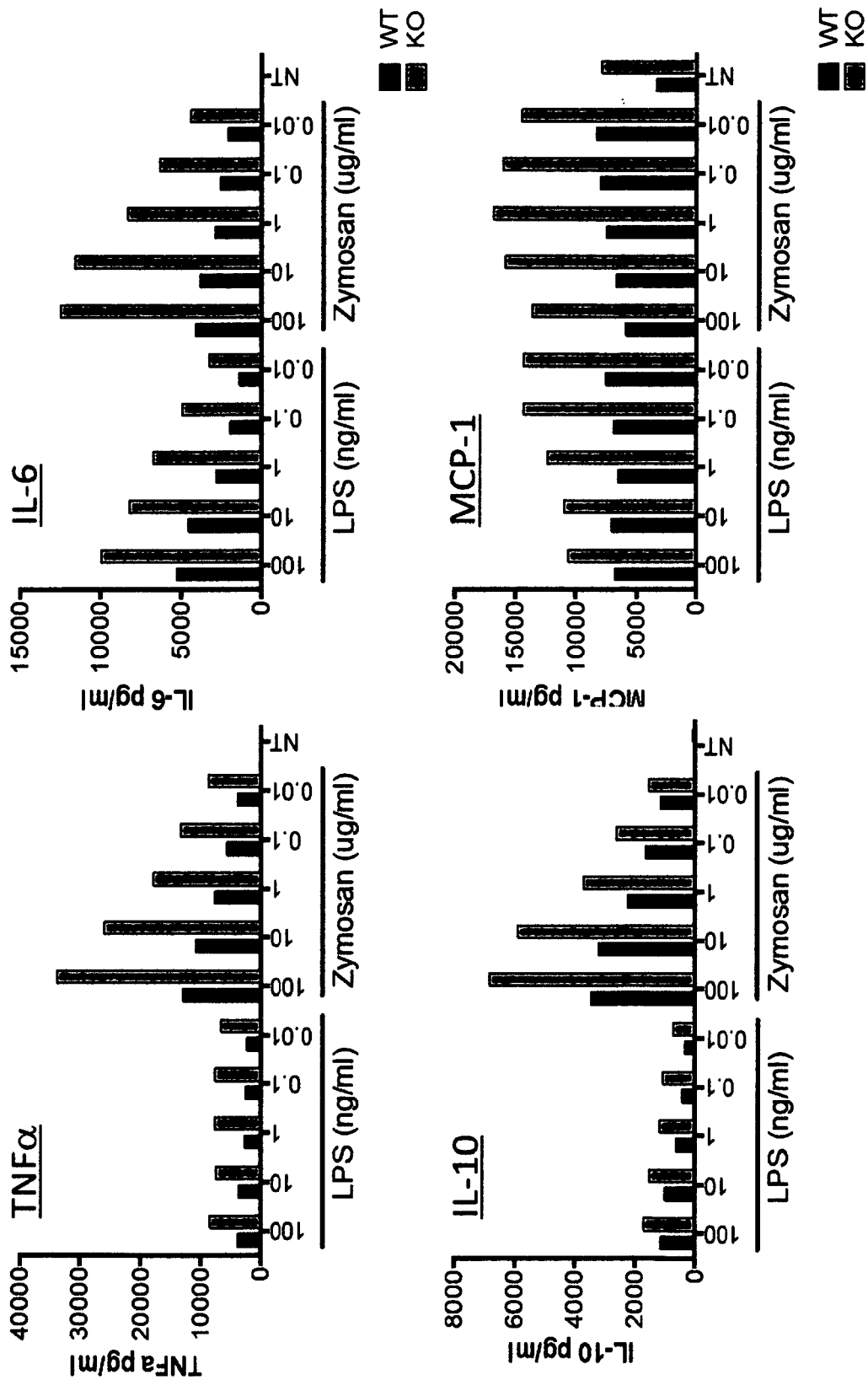


FIG. 9A

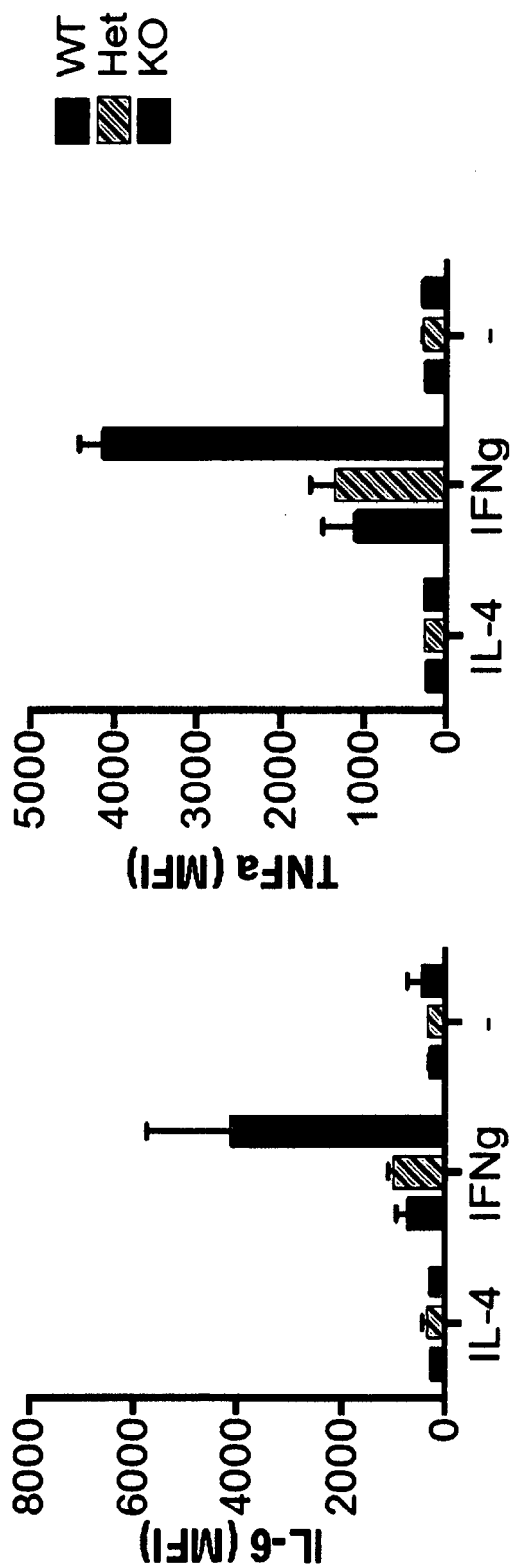


FIG. 9B

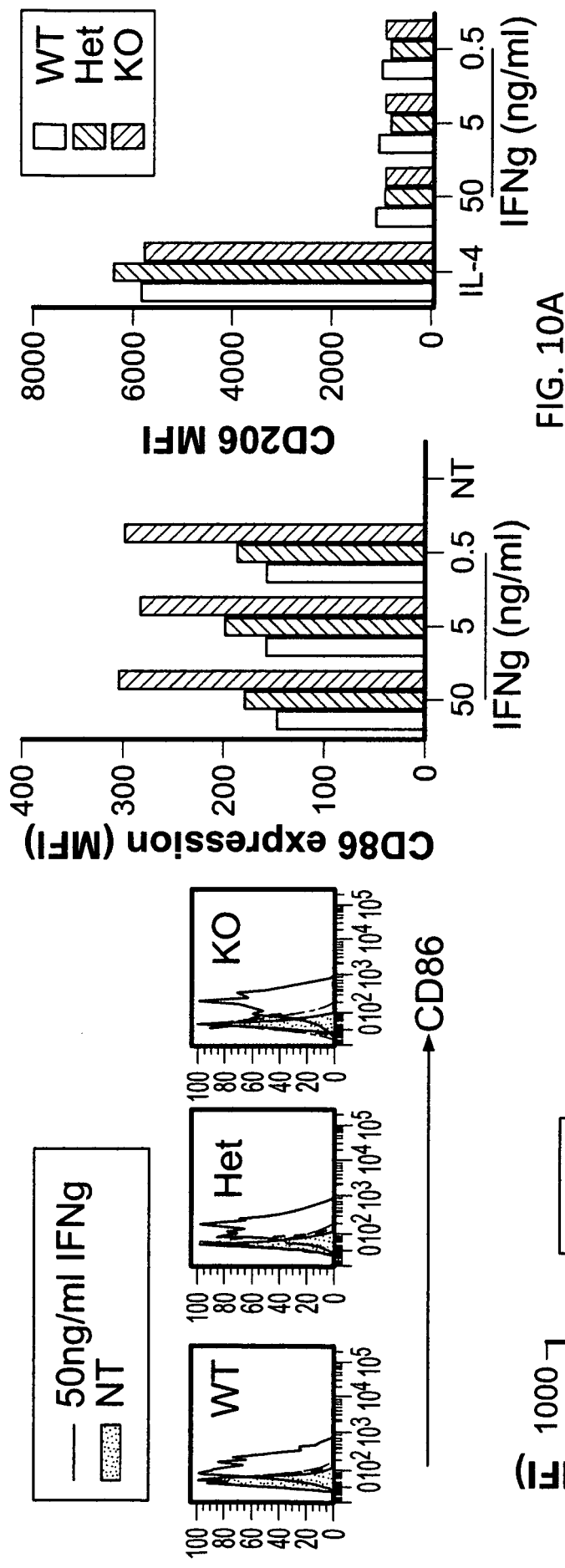


FIG. 10A

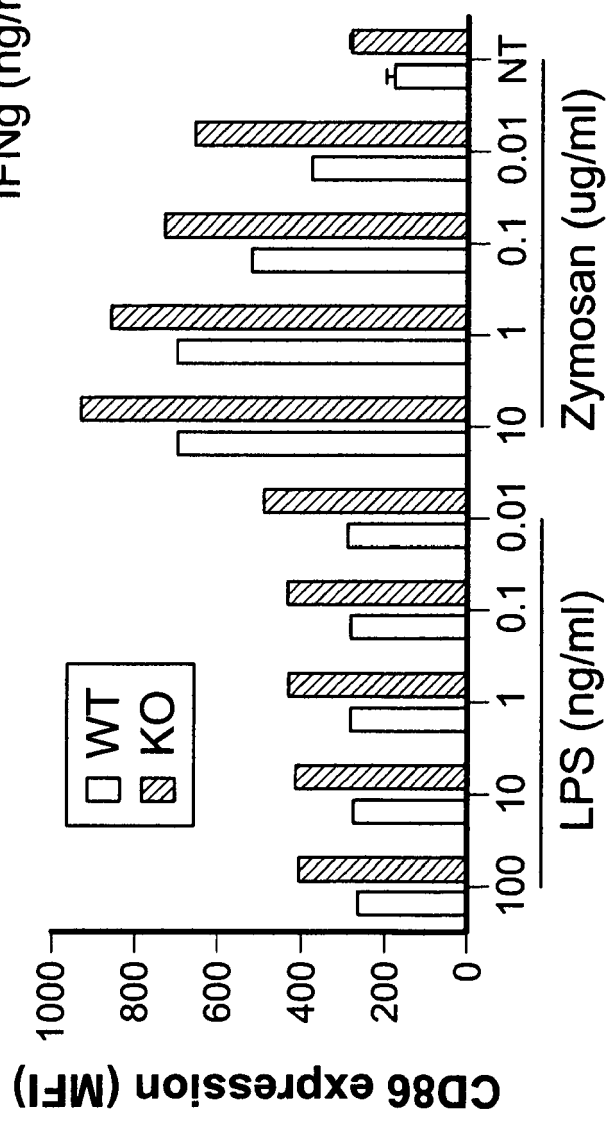


FIG. 10B

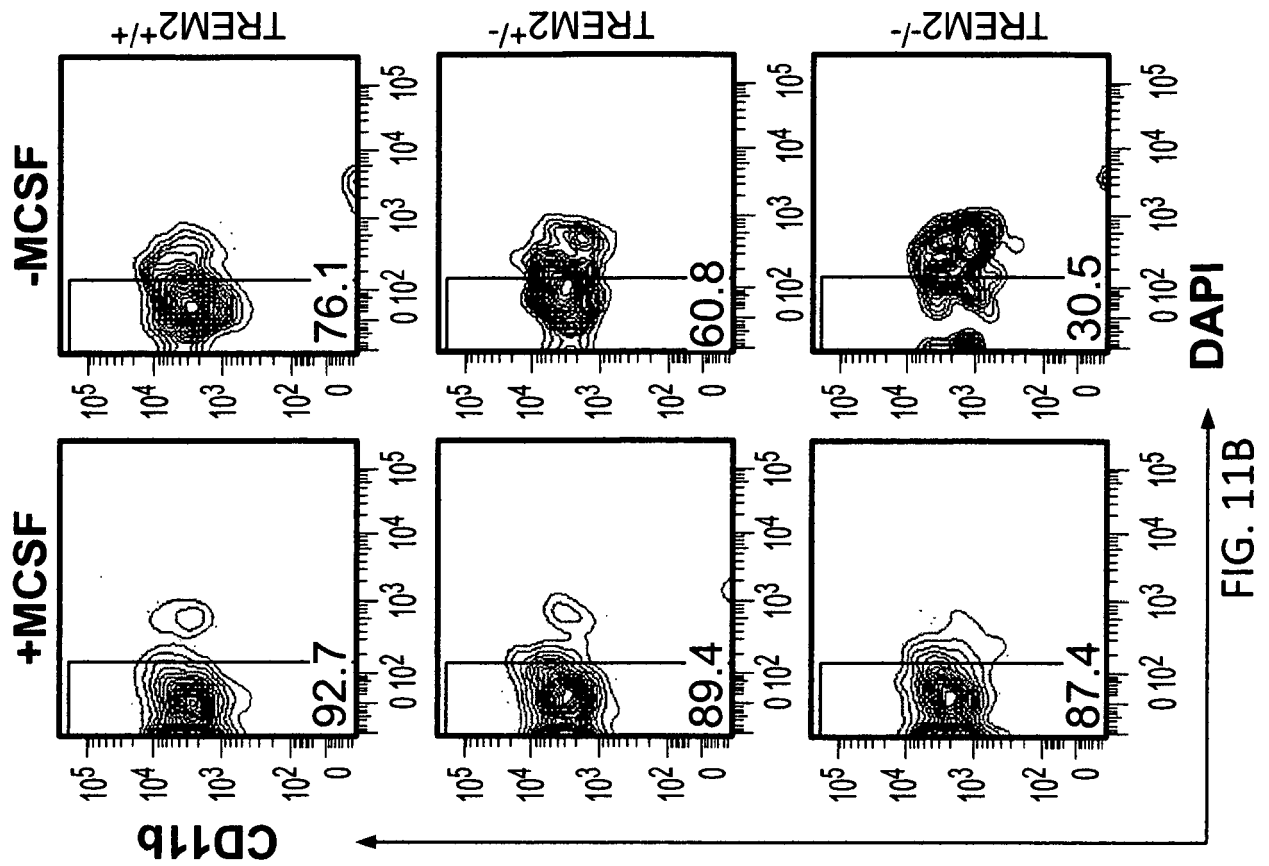


FIG. 11B

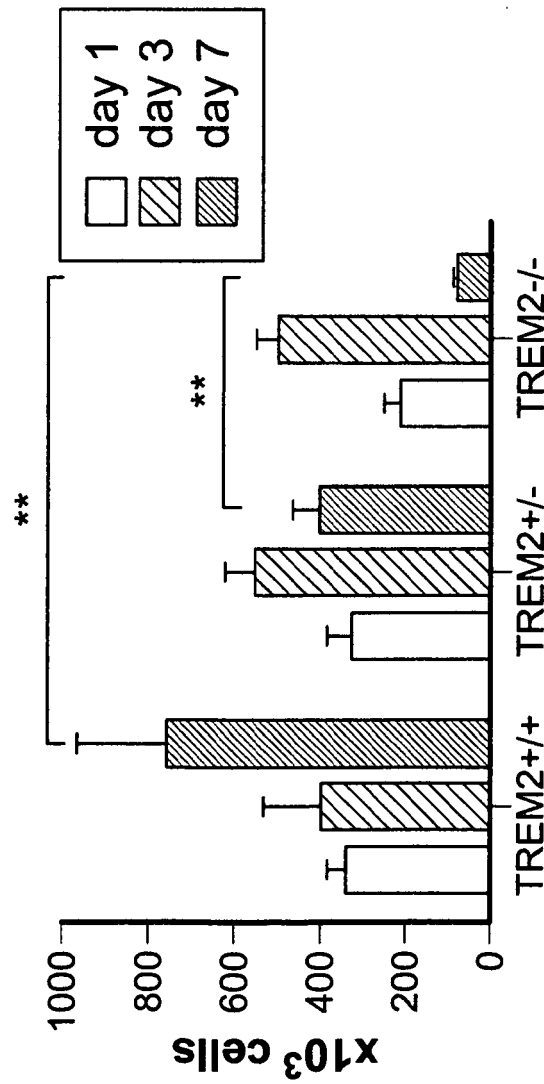


FIG. 11A

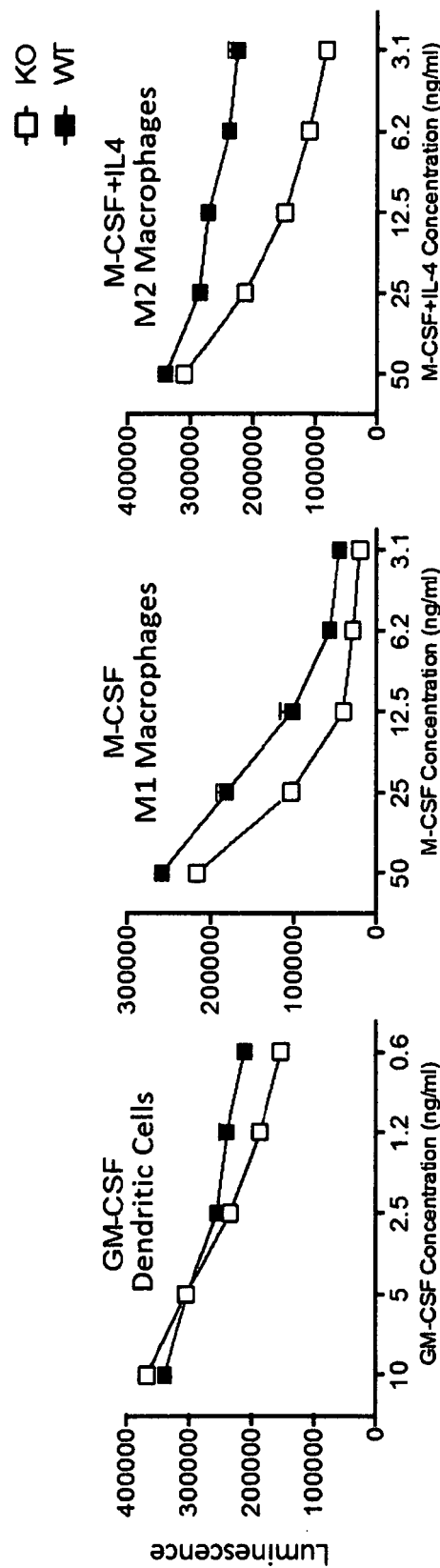


FIG. 11C

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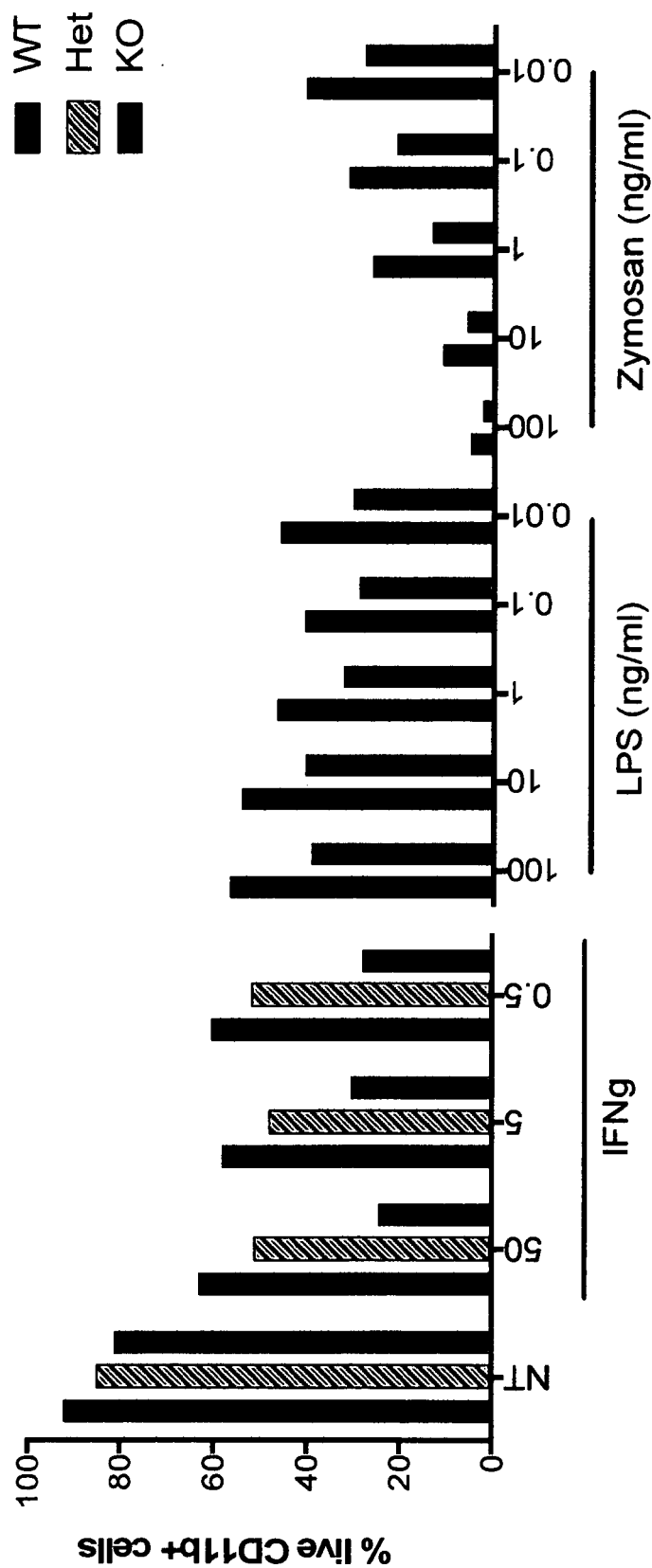


FIG. 11D

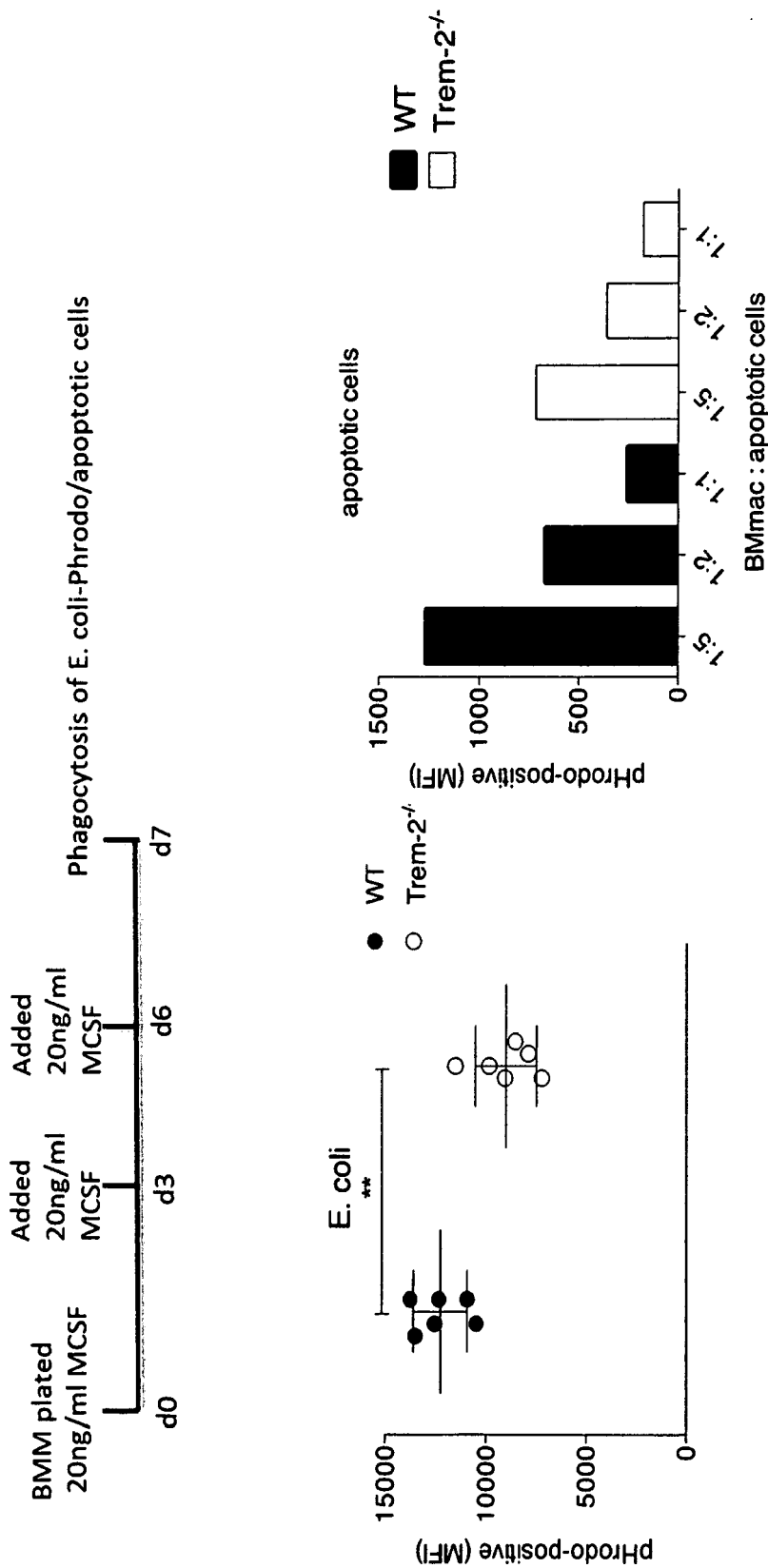


FIG. 12

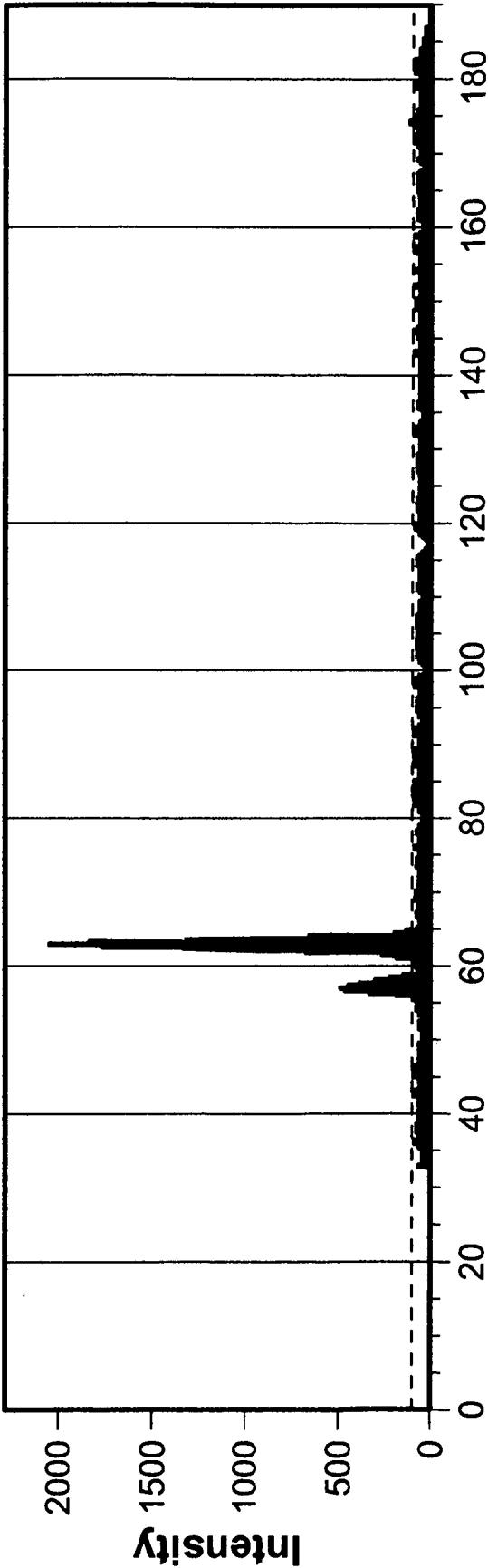


FIG. 13

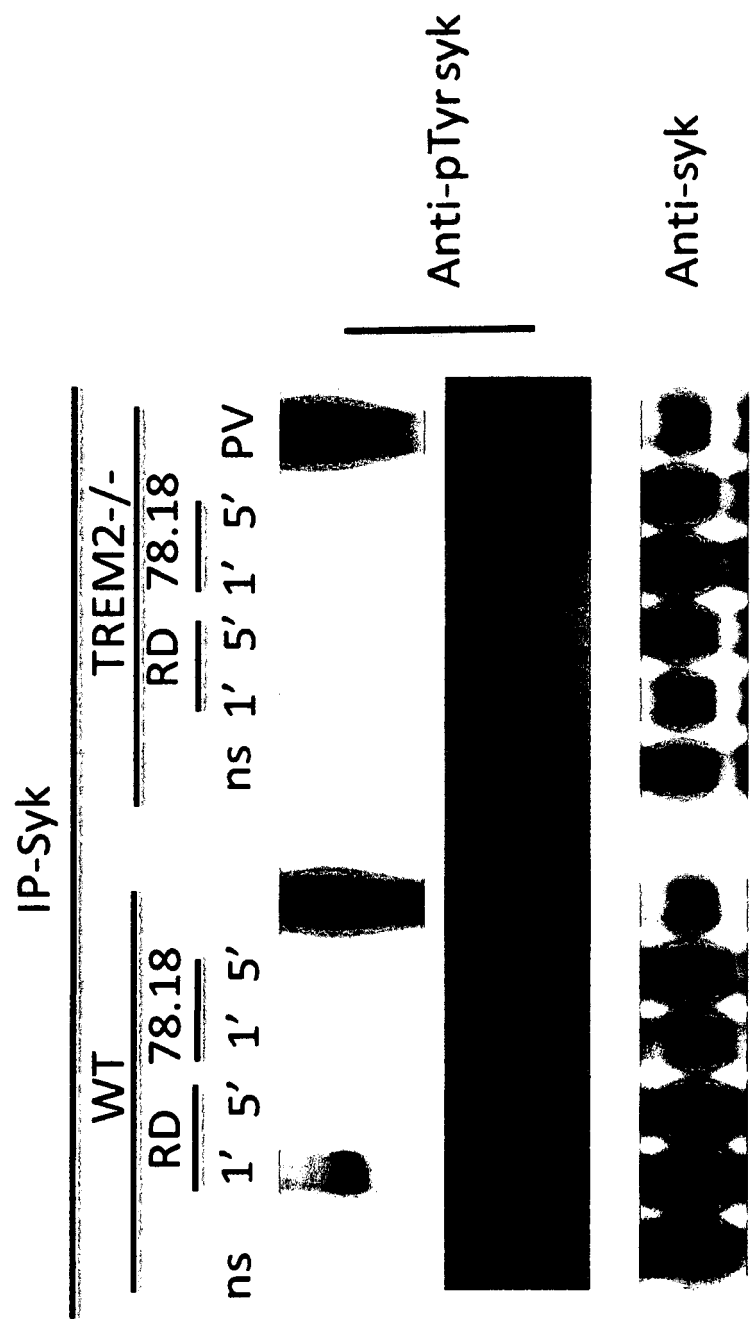


FIG. 14

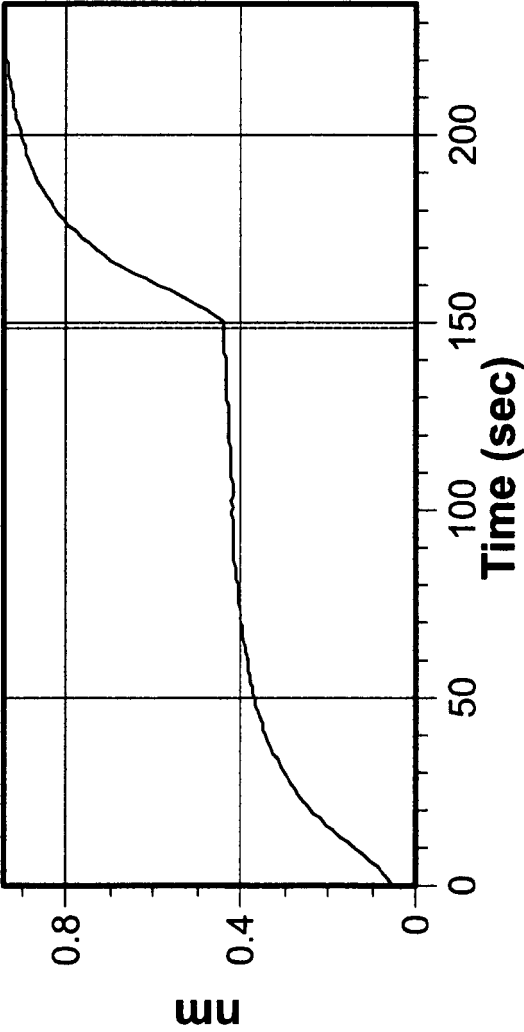


FIG. 15A

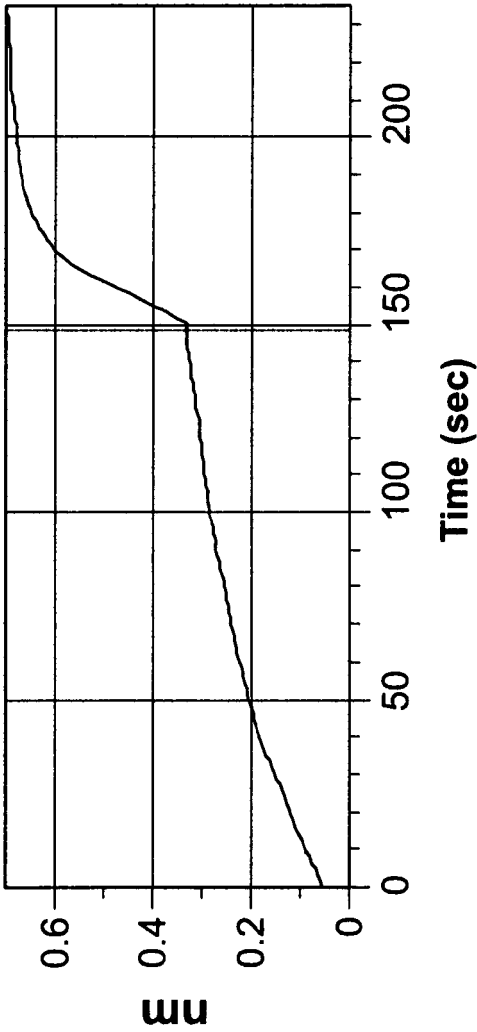


FIG. 15B

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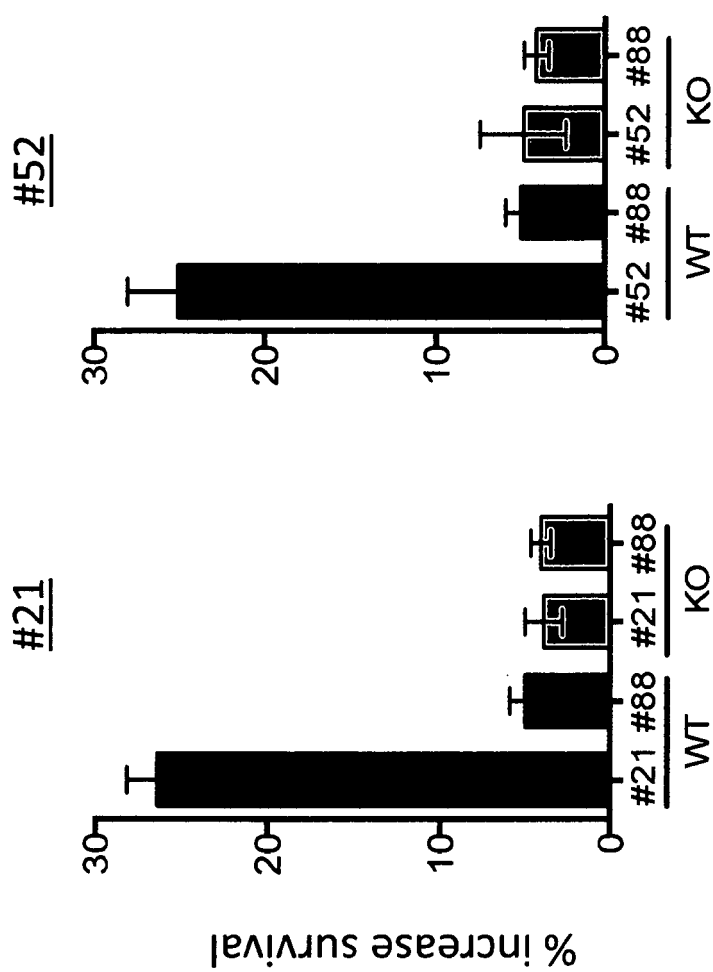


FIG. 16

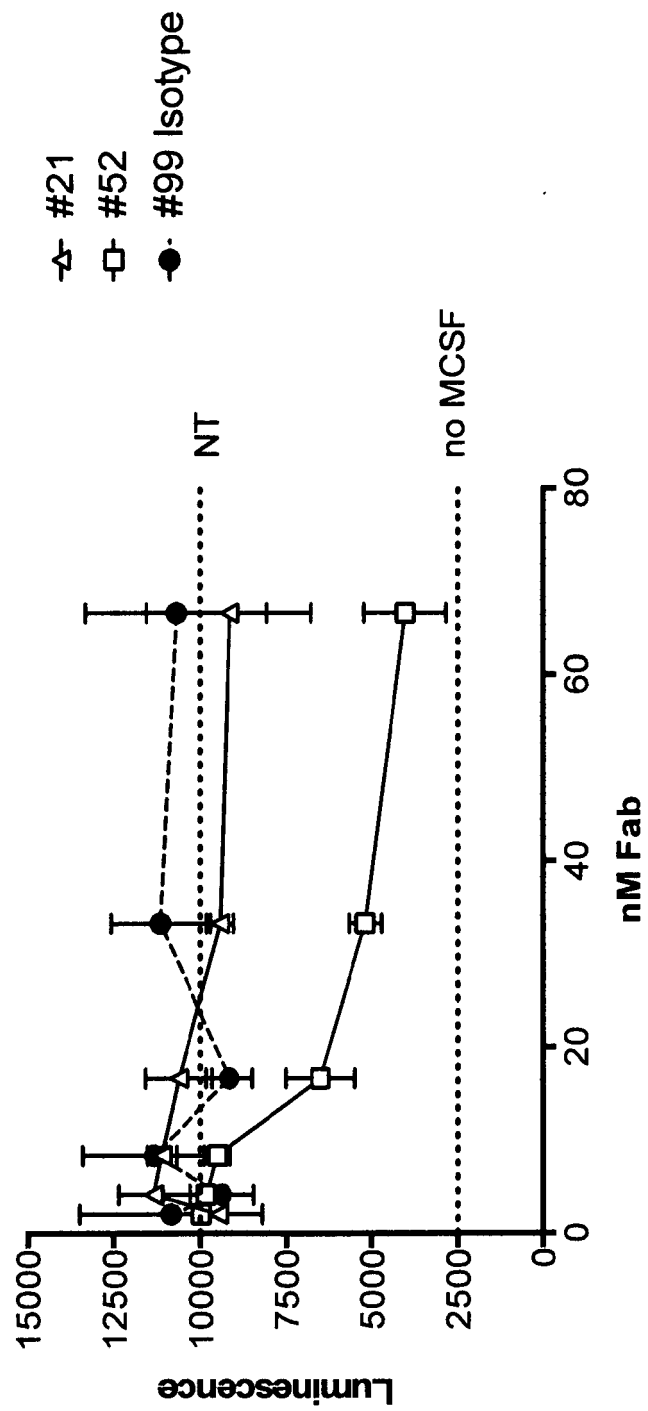
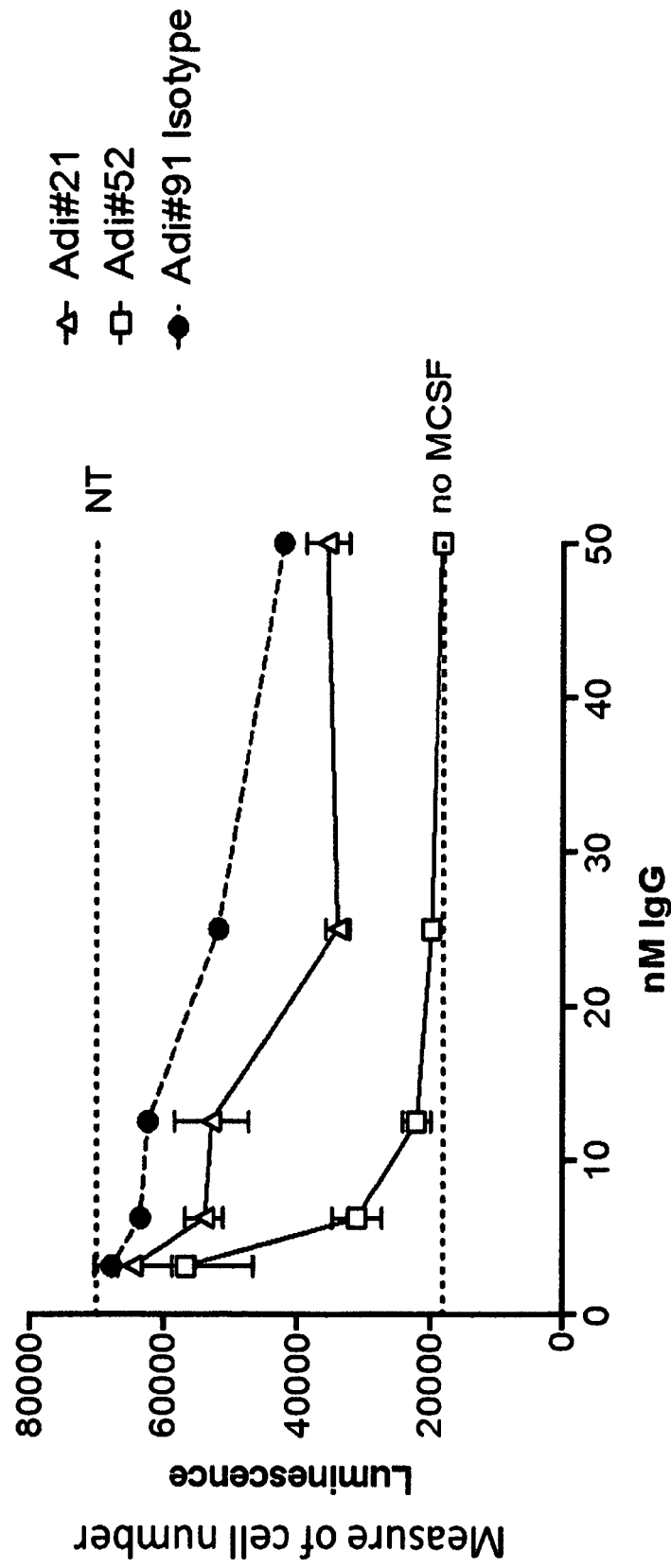


FIG. 17A



Full length antibodies in solution

FIG. 17B

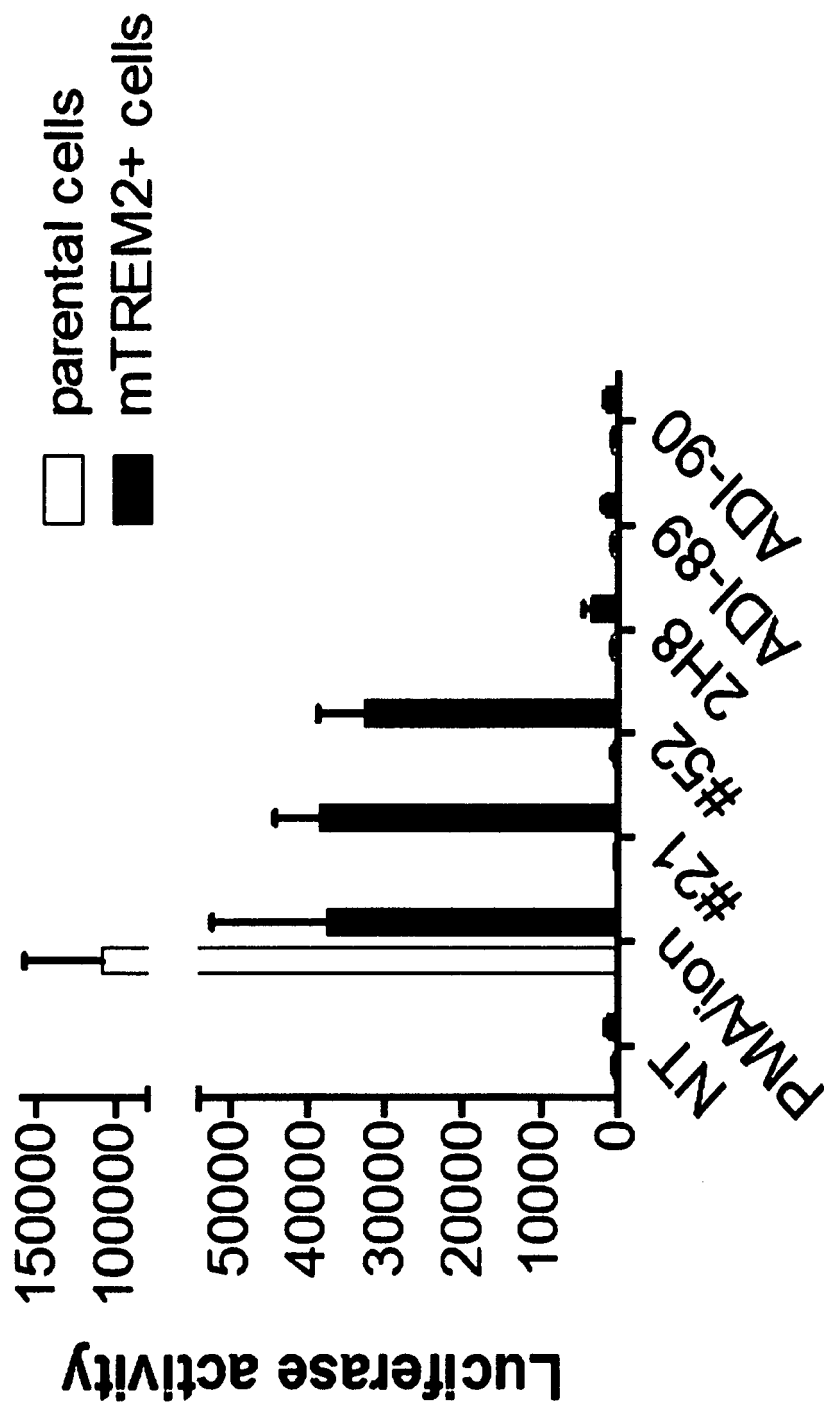


FIG. 18A

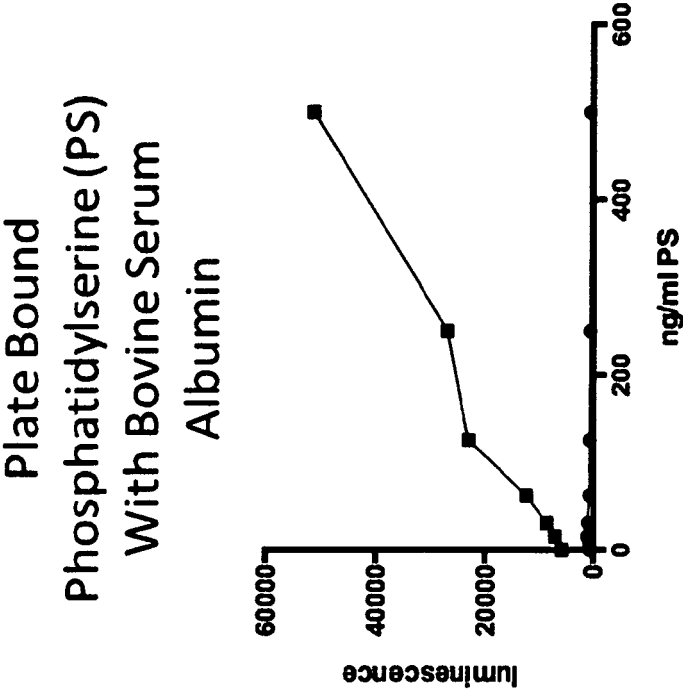
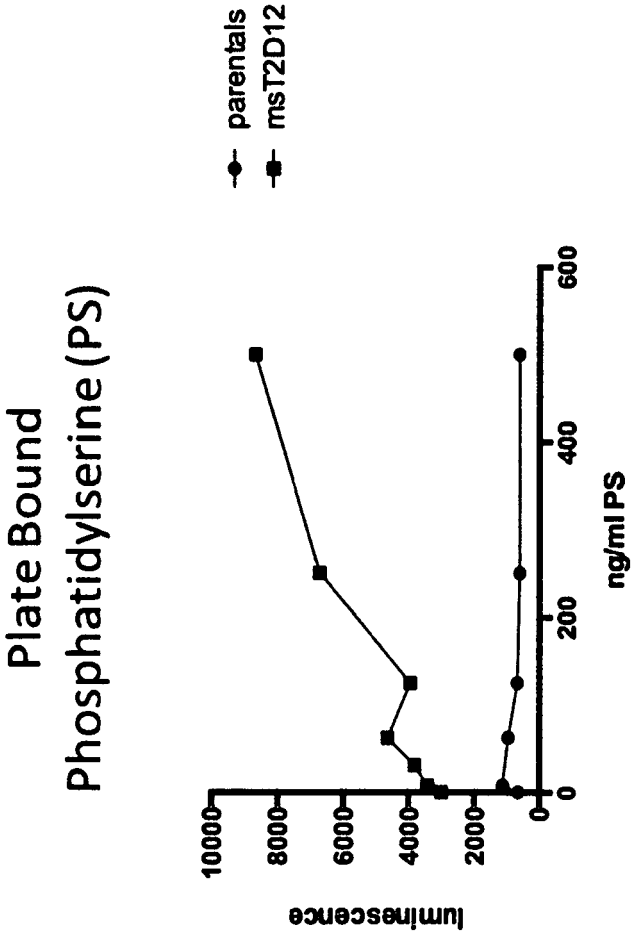


FIG. 18B

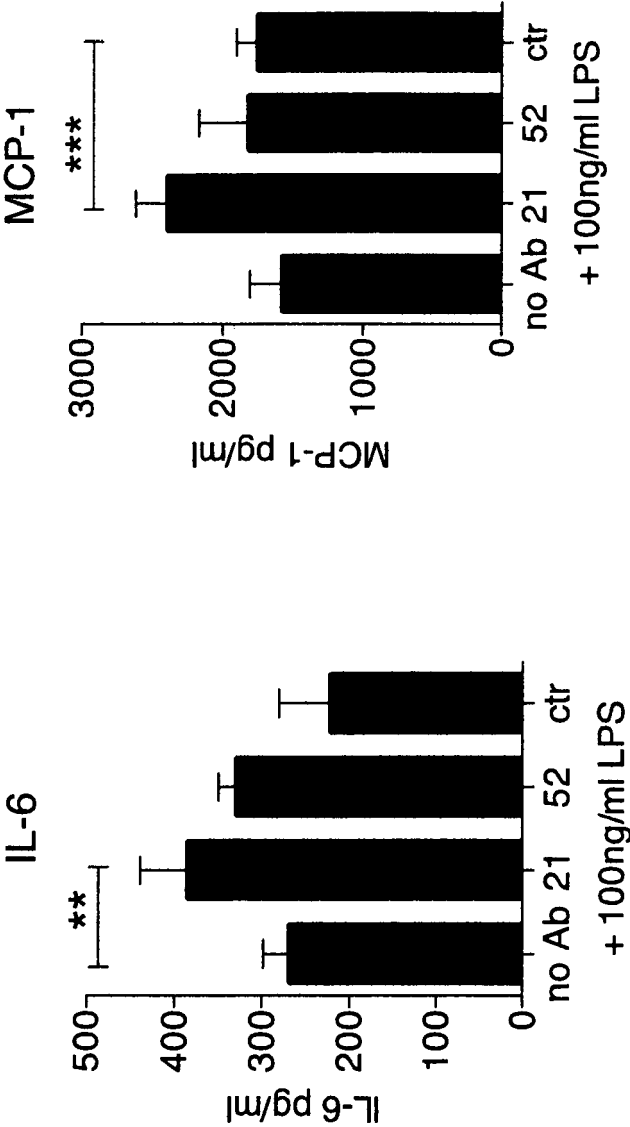


FIG. 18D

FIG. 18C

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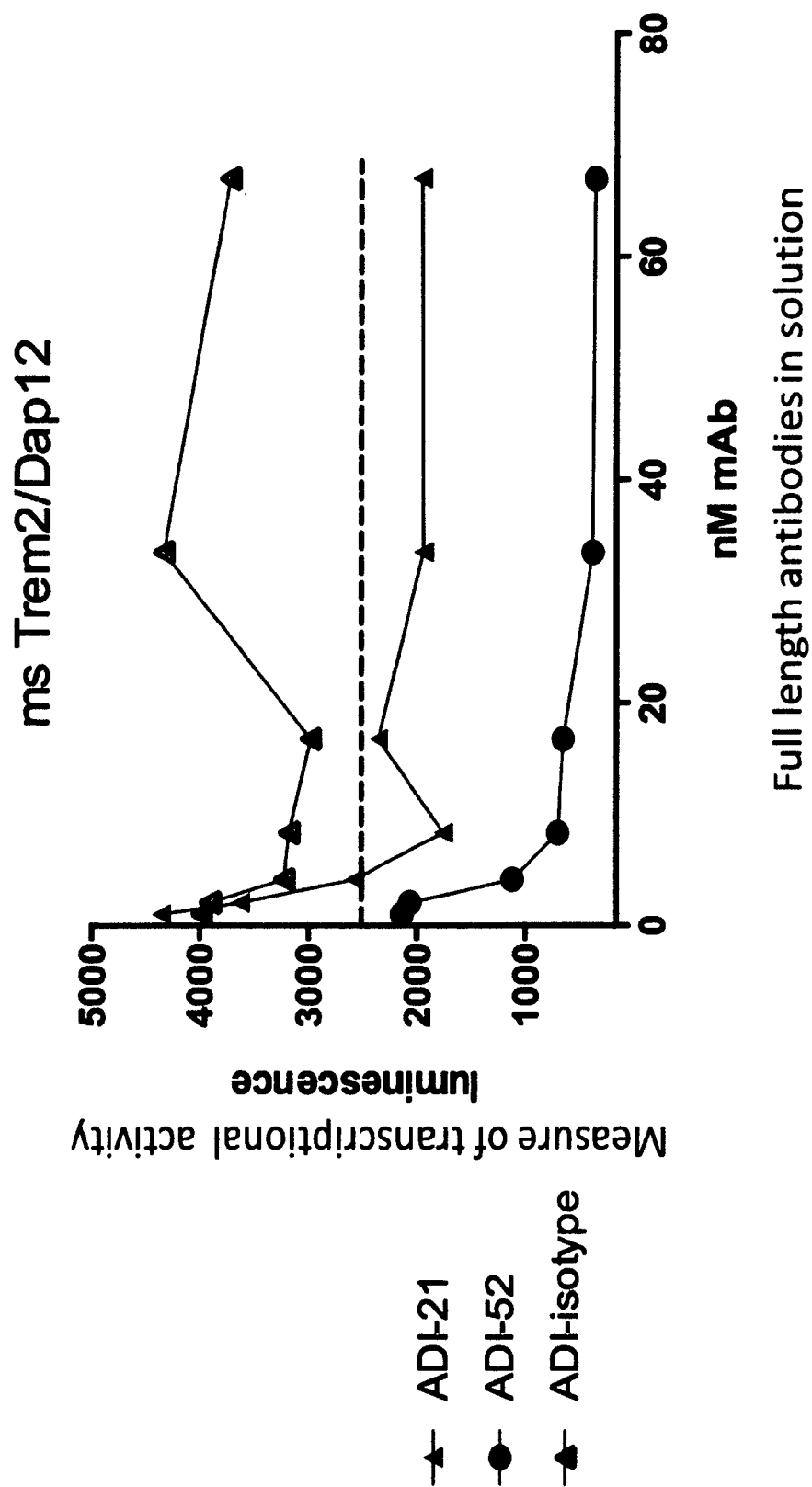


FIG. 19

- Ab1 – Heavy chain variable region (SEQ ID NO:242)
EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKGLEWVSISGGSTYYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCAKGTPTLLFOH
WGQGLVTVSS
- Ab2 – Heavy chain variable region (SEQ ID NO:244)
EVQLLESGGGLVQPGGSLRLSCAASGFTSSSAMSWVRQAPGKGLEWVSISGGSTYYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCAKVPSYDYWS
GYSNYYYMDVWGKGITTVTVSS
- Ab3 – Heavy chain variable region (SEQ ID NO:246)
QVQLVQSGAEVKKPGSSVKVSCKASGGTFSSYAISWVRQAPGQGLEWMGGIPIFGTANYAQKFOGRVTITADESTAYMELSSLRSEDTAVYYCAREQYHVGMD
VWGKGITTVTVSS
- Ab4 – Heavy chain variable region (SEQ ID NO:248)
QVQLVQSGAEVKKPGSSVKVSCKASGGTFSSYAISWVRQAPGQGLEWMGGIPIFGTASYAQKFOGRVTITADESTAYMELSSLRSEDTAVYYCARGVDSIMDYW
GQGILVTVSS
- Ab5 – Heavy chain variable region (SEQ ID NO:250)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYIHWVRQAPGQGLEWMGINPSGGSTISYAOKFOGRVTMTRDTSTSTVYMELSSLRSEDTAVYYCARAPQESPYV
FDIWWGQGTMTVTVSS
- Ab6 – Heavy chain variable region (SEQ ID NO:252)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHWVRQAPGQGLEWMGINPGGGSTISYAOKFOGRVTMTRDTSTSTVYMELSSLRSEDTAVYYCARGSPITYGY
LYDPWGGQGLVTVSS
- Ab7 – Heavy chain variable region (SEQ ID NO:254)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHWVRQAPGQGLEWMGINPSGGSTIYAOKFOGRVTMTRDTSTSTVYMELSSLRSEDTAVYYCARTSSKERD
YWGQGLVTVSS
- Ab8 – Heavy chain variable region (SEQ ID NO:256)
QLQLQESGPGLVKPSETLSLTCTVSGGSSSSSYWGWIRQPPGKGLEWIGSISYSGSTYYNPSLKSRVTISVDTSKNQFSLKLSSTTAADTAVYYCARGPYRLLLGMD
YWGQGTITTVTVSS
- Ab9 – Heavy chain variable region (SEQ ID NO:258)
EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYWIGWVRQMPGKGLEWMGIIYPGDSDIITYSPSFOGQVTISADKSISTAYLQWSSLKASDTAMYYCARLHISGEVNW
EDPWGQGITLVTVSS
- Ab10 – Heavy chain variable region (SEQ ID NO:260)
EVQLVQSGAEVKKPGESLKISCKGSGYSFTSNWIGWVRQMPGKGLEWMGIIYPGDSDIRYSPSFOGQVTISADKSISTAYLQWSSLKASDTAMYYCAREAGYDYGEL
AFDIWGGQGTMTVTVSS

FIG. 20A

- Ab11 – Heavy chain variable region (SEQ ID NO:262)
EVQLVQSGAEVKKPGESLKISCKGSGYSFTIYWGIVVRQMPGKGLEWMGIYPGDSDIRYSPFQGVTISADKSISTAYLQWSSLKASDTAMYYCARAGHYDGGHLGMD
VWGQGTTITVSS
- Ab12 – Heavy chain variable region (SEQ ID NO:264)
EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYWGWVRQMPGKGLEWMGIYPGDSDIRYSPFQGVTISADKSISTAYLQWSSLKASDTAMYYCARLGHYSGTVSSYGM
DVWGQGTITVTVSS
- Ab13 – Heavy chain variable region (SEQ ID NO:266)
QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYGISWVRQAPGQGLEWMGWISAYNGNTNYAOKLOGRVTMTDTSTSTAYMELRSLRSDDTAVYYCARGPSHYDDLA
WGQGITLVTVSS
- Ab14 – Heavy chain variable region (SEQ ID NO:268)
QVQLQESGPGLVKPSQITLSLTCTVSGGISGGYYWSWIRQHPGKGLEWIGNIYYSGSTVYNPSLKSRVTISVDTSKNQFSLKLSSVTAADTAVYYCARGLYGYGVLDVWG
QGIMVTVSS
- Ab15 – Heavy chain variable region (SEQ ID NO:268)
QVQLQESGPGLVKPSQITLSLTCTVSGGISGGYYWSWIRQHPGKGLEWIGNIYYSGSTVYNPSLKSRVTISVDTSKNQFSLKLSSVTAADTAVYYCARGLYGYGVLDVWG
QGIMVTVSS
- Ab16 – Heavy chain variable region (SEQ ID NO:271)
QLQLQESGPGLVKPSETLSLTCTVSGGISNSYYWGWIRQPPGKGLEWIGSIYYSGSTIYNPSLKSRVTISVDTSKNQFSLKLSSVTAADTAVYYCARGVLGYGVFDYWGQ
GTLVTVSS
- Ab17 – Heavy chain variable region (SEQ ID NO:271)
QLQLQESGPGLVKPSETLSLTCTVSGGISNSYYWGWIRQPPGKGLEWIGSIYYSGSTIYNPSLKSRVTISVDTSKNQFSLKLSSVTAADTAVYYCARGVLGYGVFDYWGQ
GTLVTVSS
- Ab18 – Heavy chain variable region (SEQ ID NO:274)
QVQLQESGPGLVKPSETLSLTCTVSGGISYYWSWIRQPPGKGLEWIGSIYYSGSTIYNPSLKSRVTISVDTSKNQFSLKLSSVTAADTAVYYCARDGGGEYPSGTPFDIWG
QGIMVTVSS
- Ab19 – Heavy chain variable region (SEQ ID NO:274)
QVQLQESGPGLVKPSETLSLTCTVSGGISYYWSWIRQPPGKGLEWIGSIYYSGSTIYNPSLKSRVTISVDTSKNQFSLKLSSVTAADTAVYYCARDGGGEYPSGTPFDIWG
QGIMVTVSS
- Ab20 – Heavy chain variable region (SEQ ID NO:277)
QVQLQESGPGLVKPSETLSLTCTVSGGISYYWSWIRQPPGKGLEWIGSIYYSGSTIYNPSLKSRVTISVDTSKNQFSLKLSSVTAADTAVYYCARGSMASFFDYWGQGITL
VTVSS

FIG. 20A (Cont.)

Ab22 – Heavy chain variable region (SEQ ID NO:262)
EVQLVQSGAEVKKPGESLKISCKGSGYSFTIYWIGWVRQMPGKGLEWVGIIYPGDSDIRYSPFQGVTISADKSISTAYLQWSSLKASDTAMYYCARAGHYDGGHLGMD
VWGQGTTITVSS

Ab23 – Heavy chain variable region (SEQ ID NO:280)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLEWVSAISGGSTIYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCAKLGHSHMDVWGQ
GTITVTSS

Ab24 – Heavy chain variable region (SEQ ID NO:282)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLEWVSAISGGSTIYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCAKPLKRGRGFYWG
QGTLVTSS

Ab25 – Heavy chain variable region (SEQ ID NO:284)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLEWVSVISGGSTIYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCAKEGRITITMDWGQG
TLVTSS

Ab26 – Heavy chain variable region (SEQ ID NO:286)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLEWVSVISGGSTIYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCAKDQYSVLIDYWGQ
GTLVTSS

Ab27 – Heavy chain variable region (SEQ ID NO:288)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLEWVSAISGGSTIYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCAKKYSSRGVYFDY
WGQGLVTSS

Ab28 – Heavy chain variable region (SEQ ID NO:290)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLEWVSAISGGSTIYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCARLGGAVGARHVI
YFDYWGGQTLVTSS

Ab29 – Heavy chain variable region (SEQ ID NO:292)
QVQLVESGGGVVQPGRSLRLSCAASGFTFSYGMHWVRQAPGKGLEWVAVISYDGSNKYYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCARGQYYGGSGWF
DPWGGQTLVTSS

Ab30 – Heavy chain variable region (SEQ ID NO:294)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLEWVSAISGGSTIYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCARLGOEYAYFOHW
GQGITLVTSS

FIG. 20A (Cont.)

- Ab31 – Heavy chain variable region (SEQ ID NO:296)
QVQLVESGGGVVQPGKGLWVAVIWDGSKYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARRRDGYDEVF
DIWGQGTMTVSS
- Ab32 – Heavy chain variable region (SEQ ID NO:298)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLWVSAISGGSTYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARVPHYVVL DYW
GQGITLVTVSS
- Ab33 – Heavy chain variable region (SEQ ID NO:300)
QVQLVESGGGVVQPGKGLWVAVISYDGSNKYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARAGGHLEFDYWG
GQGITLVTVSS
- Ab34 – Heavy chain variable region (SEQ ID NO:302)
QVQLVESGGGVVQPGKGLWVAVISYDGSNKYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARDRGGEYVDFAF
DIWGQGTMTVSS
- Ab35 – Heavy chain variable region (SEQ ID NO:304)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLWVSAISGGSTYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARTRSGYGASNYFD
YWGQGITLVTVSS
- Ab36 – Heavy chain variable region (SEQ ID NO:306)
QVQLVESGGGVVQPGKGLWVAVIWDGSKYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARGTGAAAASPA
FDIWGQGTMTVTVSS
- Ab37 – Heavy chain variable region (SEQ ID NO:308)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLWVSAISGGSTYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARVGOYMLGMDV
WGQGITLVTVSS
- Ab38 – Heavy chain variable region (SEQ ID NO:310)
QVQLVESGGGVVQPGKGLWVAVIWDGSKYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARGAPVDYGGIE
PEYFQHWGQGITLVTVSS
- Ab39 – Heavy chain variable region (SEQ ID NO:312)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLWVSAISGGSTYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVVYCAKHVHVGIADFJWG
QGTMTVTVSS
- Ab40 – Heavy chain variable region (SEQ ID NO:304)
EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKGLWVSAISGGSTYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARTRSGYGASNYFD
YWGQGITLVTVSS

FIG. 20A (Cont.)

- Ab41 – Heavy chain variable region (SEQ ID NO:315)
EVQLLESGGGLVQPGGSLRLSCAASGFTSTYAMSWVRQAPGKGLEWVSAISGGSTYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARAMARKSVAFDIW
 GGTMVTVSS
- Ab42 – Heavy chain variable region (SEQ ID NO:317)
EVQLLESGGGLVQPGGSLRLSCAASGFTSSSAMSWVRQAPGKGLEWVSAISGGSTYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKVPSTYQRTAFDIP
 WGQTLVTVSS
- Ab43 – Heavy chain variable region (SEQ ID NO:319)
EVQLLESGGGLVQPGGSLRLSCAASGFTSSSAMSWVRQAPGKGLEWVSAISGGSTYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKSPAVAGIYRADY
 WGQTLVTVSS
- Ab44 – Heavy chain variable region (SEQ ID NO:306)
QVQLVESGGGVVQPGSRSLRLSCAASGFTSTYGMHWVRQAPGKGLEWVAWIWDGSKYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARGTGAAASPA
 FDIWGQTMVTVSS
- Ab45 – Heavy chain variable region (SEQ ID NO:322)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHWVRQAPGQGLEWMGIINPSGGSTSYAQKFQGRVTMTTRDTSTVYMELSSLRSEDYAVYYCARGPGYTTALDYY
 YMDVWGKGTITVSS
- Ab46 – Heavy chain variable region (SEQ ID NO:324)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHWVRQAPGQGLEWMGIINPSGGSTSYAQKFQGRVTMTTRDTSTVYMELSSLRSEDYAVYYCARPAKTDYWGQ
 GTITVSS
- Ab47 – Heavy chain variable region (SEQ ID NO:326)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHWVRQAPGQGLEWMGIINPSGGSTSYAQKFQGRVTMTTRDTSTVYMELSSLRSEDYAVYYCARPGKSMDEVWGQ
 GTITVSS
- Ab48 – Heavy chain variable region (SEQ ID NO:326)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHWVRQAPGQGLEWMGIINPSGGSTSYAQKFQGRVTMTTRDTSTVYMELSSLRSEDYAVYYCARPGKSMDEVWGQ
 GTITVSS
- Ab49 – Heavy chain variable region (SEQ ID NO:324)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHWVRQAPGQGLEWMGIINPSGGSTSYAQKFQGRVTMTTRDTSTVYMELSSLRSEDYAVYYCARPAKTDYWGQ
 GTITVSS
- Ab50 – Heavy chain variable region (SEQ ID NO:250)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYIHWVRQAPGQGLEWMGIINPSGGSTSYAQKFQGRVTMTTRDTSTVYMELSSLRSEDYAVYYCARAPOESPYYFDIW
 GGTMVTVSS

FIG. 20A (Cont.)

- Ab51 – Heavy chain variable region (SEQ ID NO:331)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHVVRQAPGQGLEWMGHNPSGGSTSYAQKFQGRVTMTRDTSTSTVYMELSSLRSEDTAVYYCARGVGQDYYTMM
DYWGKGTTVTVSS
- Ab53 – Heavy chain variable region (SEQ ID NO:250)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYIHVVRQAPGQGLEWMGHNPSGGSTSYAQKFQGRVTMTRDTSTSTVYMELSSLRSEDTAVYYCARAPQESPVYVFDIW
GQGTMTVTSS
- Ab54 – Heavy chain variable region (SEQ ID NO:322)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHVVRQAPGQGLEWMGHNPSGGSTSYAQKFQGRVTMTRDTSTSTVYMELSSLRSEDTAVYYCARGPGYTTALDYY
YMDYWGKGTTVTVSS
- Ab55 – Heavy chain variable region (SEQ ID NO:335)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYMHVVRQAPGQGLEWMGWNPNSGGINYYAQKFQGRVTMTRDTSTSTAYMELSLRSDDTAVYYCARGPLYHPMIFD
YWGQGLVTVSS
- Ab56 – Heavy chain variable region (SEQ ID NO:337)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHVVRQAPGQGLEWMGHNPSGGINYYAQKFQGRVTMTRDTSTSTAYMELSLRSDDTAVYYCARASSVDNWWGQ
GTLVTVSS
- Ab57 – Heavy chain variable region (SEQ ID NO:339)
QVQLVQSGAEVKKPGASVKVSCKASGYTFINYGISWVRQAPGQGLEWMGWISAYNGNINYYAQKLQGRVTMTTDTSTSTAYMELSLRSDDTAVYYCARGPTKAYYGS
GSYVVFDPWGGTLVTVSS
- Ab58 – Heavy chain variable region (SEQ ID NO:341)
EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYWJGWVRQMPGKGLEWMGIYPGDSDIRYSPSFGQVTSADKSISTAYLQWSSLKASDTAMYYCARLGIYSTGAIAFDI
WGQGTMTVTSS
- Ab59 – Heavy chain variable region (SEQ ID NO:343)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYMHVVRQAPGQGLEWMGWNPNSGGINYYAQKFQGRVTMTRDTSTSTAYMELSLRSDDTAVYYCARGGVWYSLFD
IWGQGTMTVTSS
- Ab60 – Heavy chain variable region (SEQ ID NO:345)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYMHVVRQAPGQGLEWMGWNPNSGGTSYAQKFQGRVTMTRDTSTSTAYMELSLRSDDTAVYYCARASKMGDDDW
GQGTMTVTSS

FIG. 20A (Cont.)

- Ab61 – Heavy chain variable region (SEQ ID NO:347)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYGIHWVRQAPGQGLEWMGWISAYNGNTNYAQKLOGRVMTTDTSTSTAYMELSLRSDDTA VYYCARGGVPRVSYFQ
HWQGTLVTVSS
- Ab62 – Heavy chain variable region (SEQ ID NO:349)
EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYWIGWVRQMPGKGLEWMGIIPGDSDIRYSPFQGVVISADKSISTAYLQWSSLKASDTAMYYCARAGHYDDWSGLGL
DVWGQGITMTVTVSS
- Ab63 – Heavy chain variable region (SEQ ID NO:351)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYGISWVRQAPGQGLEWMGWISTYNGNTNYAQKLOGRVMTTDTSTSTAYMELSLRSDDTA VYYCARGSGSGYDSWY
DWGQGITMTVTVSS
- Ab64 – Heavy chain variable region (SEQ ID NO:353)
EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYWIGWVRQMPGKGLEWMGIIPGDSDIRYSPFQGVVISADKSISTAYLQWSSLKASDTAMYYCARLGRWSSGSTAFDI
WGQGITMTVTVSS
- Ab65 – Heavy chain variable region (SEQ ID NO:355)
EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYWIGWVRQMPGKGLEWMGIIPGDSDIRYSPFQGVVISADKSISTAYLQWSSLKASDTAMYYCARLGRKPSGSVAFDI
WGQGITMTVTVSS
- Ab66 – Heavy chain variable region (SEQ ID NO:357)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYMHVWVRQAPGQGLEWMGWINPNSGGTNYAQKFOGRVTMTRDTISISTAYMELSLRSDDTA VYYCARAGHKTHDY
WGQGITMTVTVSS
- Ab67 – Heavy chain variable region (SEQ ID NO:326)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYMHVWVRQAPGQGLEWMGIINPNSGGSTIY AQKFOGRVTMTRDTSTSTVMELSSLRSEDTA VYYCARPCKSMDEVWGQ
GTTVTVSS
- Ab68 – Heavy chain variable region (SEQ ID NO:360)
QVQLVESGGGVVQPGRLSLSCAASGFTFSYGMHWVRQAPGKGLEWVALIWDGSKNYADSVKGRFTISRDNKNTLYLQMNSLRAEDTA VYYCAKPGSMIDYWG
QGTLVTVSS
- Ab69 – Heavy chain variable region (SEQ ID NO:362)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYMHVWVRQAPGQGLEWMGWINPNSGGTNYAQKFOGRVTMTRDTSTSTAYMELSLRSDDTA VYYCARAKSVDDHDYW
GQGITMTVTVSS
- Ab70 – Heavy chain variable region (SEQ ID NO:345)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYMHVWVRQAPGQGLEWMGWINPNSGGTSY AQKFOGRVTMTRDTSTSTAYMELSLRSDDTA VYYCARASKMGDDDW
GQGITMTVTVSS

FIG. 20A (Cont.)

- Ab71 – Heavy chain variable region (SEQ ID NO:365)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHVVRQAPGQGLEWMGHNFGSGSTSYAOKFOGRVTMTRDTSTSTVYMELSSLRSEDIAVYYCARDISTHDYDLAF
DIWGQGTMTVTVSS
- Ab72 – Heavy chain variable region (SEQ ID NO:367)
QVQLQESGPGLVKPSFETLSLTCTVSGGSISSYYWSWRQPPGKGLEWIGSIYYSGSTNPNPSLKSRVTISVDTSKNQFSLKLSSTAAADIAVYYCARSGETLFDYWGQGTIV
TVSS
- Ab73 – Heavy chain variable region (SEQ ID NO:369)
EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYWIGWVRQMPGKGLEWMGIYPGDSDIITYSPFQGVTSADKSISTAYLQWSSLKASDTAMYYCARAKMLDDGYAFDI
WGQGTMTVTVSS
- Ab74 – Heavy chain variable region (SEQ ID NO:357)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHVVRQAPGQGLEWMGWNPNSGGTINYAOKFOGRVTMTRDTISISTAYMELSLRSDDTAVYYCARAGHKTHDY
WGQGTIVTVSS
- Ab75 – Heavy chain variable region (SEQ ID NO:372)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYYMHVVRQAPGQGLEWMGWNPNSGGTINYAOKFOGRVTMTRDTISISTAYMELSLRSDDTAVYYCARDLGYSSLLA
LDIWGQGTMTVTVSS
- Ab76 – Heavy chain variable region (SEQ ID NO:374)
EVQLVESGGGLVKPGSLRLSCAASGFTFSSYSMNWVRQAPGKGLEWVSSISSSSIYYADSVKGRFTISRDNAKNSLYLQMNSLRAEDTAVYYCARGGRRGDDNNWFD
PWGQGTIVTVSS
- Ab77 – Heavy chain variable region (SEQ ID NO:376)
QVQLVESGGGVVQPGRLSLRSCAASGFTFSSYGMHWVRQAPGKGLEWVAVISYDGSNKYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARGPPHEMDYWG
QGTLVTVSS
- Ab78 – Heavy chain variable region (SEQ ID NO:378)
QVQLVESGGGVVQPGRLSLRSCAASGFTFSSYGMHWVRQAPGKGLEWVAWIWYDGSNKYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARTPYPWIYFDL
WGRGTLVTVSS
- Ab79 – Heavy chain variable region (SEQ ID NO:380)
EVQLVESGGGLVQPGSLRLSCAASGFTFSSYSMNWVRQAPGKGLEWVSYISGSSSIYYADSVKGRFTISRDNKNSLYLQMNSLRAEDTAVYYCARGGRRHYGGMDV
WGQGTIVTVSS
- Ab80 – Heavy chain variable region (SEQ ID NO:382)
QVQLVQSGAEVKKPGSSVKVSCKASGFTFSSYAISWVRQAPGQGLEWMGGIIPFGTANYAOKFOGRVTITADESTSTAYMELSSLRSEDIAVYYCARGGGTFWSGSWAL
YWGGQGTIVTVSS

FIG. 20A (Cont.)

Ab81 – Heavy chain variable region (SEQ ID NO:384)
QVQLVQSGAEVKKPGSSVKVSCKASGGIFSSYAISWVRQAPGQGLEWMGGIPIEGTANYAQKFGQGRVTITADESTSTAYMELSSLRSEDTAVYYCARDSGNYDYWSGAL
RYWGQGTLVTVSS

Ab82 – Heavy chain variable region (SEQ ID NO:386)
QVQLQESGPGLVKPSQITLSLTCTVSGGSISGGYYYSWIRQHPGKGLEWIGYIYSGSIVYNPFLKSRVTISVDTSKNQFSLKLSSTAAADTAVYYCARVSSSWYKAWGQG
TMVTVSS

Ab83 – Heavy chain variable region (SEQ ID NO:388)
QVQLQQWGAGLLKPSETLSLTCAVYGGSFSGYYYSWIRQPPGKGLEWIGEDHSGSTKYNPFLKSRVTISVDTSKNQFSLKLSSTAAADTAVYYCARVGVVVGRPGYSAFD
IWGQGTMTVTVSS

Ab84 – Heavy chain variable region (SEQ ID NO:351)
QVQLVQSGAEVKKPGASVKVSCKASGYTFISYGISWVRQAPGQGLEWMGWISITYNQNTNYAQKLOGRVIMTIDISTSTAYMELRSLRSDDTAVYYCARGSGSGYDSWY
DWGQGTMTVTVSS

Ab85 – Heavy chain variable region (SEQ ID NO:391)
QVQLVESGGGVVQPGRSLRLSCAASGFTFSSYGMHWWVRQAPGKGLEWVAVIWYDGSNKYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKDLGYYGGA
AYGMDVVWGQGTITVTVSS

Ab86 – Heavy chain variable region (SEQ ID NO:393)
QVQLVESGGGVVQPGRSLRLSCAASGFTFSSYGMHWWVRQAPGKGLEWVAVISYDGSNKYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKDGVYYGLGNW
FDPWGQGTMTVTVSS

Ab87 – Heavy chain variable region (SEQ ID NO:395)
QVQLQESGPGLVKPSETLSLTCTVSGGSISYYYSWIRQPPGKGLEWIGSIYYSGSTNYPNPSLKSRVTISVDTSKNQFSLKLSSTAAADTAVYYCARHGWDRVGVWFDPPWQG
GLVTVSS

FIG. 20A (Cont.)

- Ab1 – Light chain variable region (SEQ ID NO:243)
 EIVMTQSPATLSVSPGERATLSCRASQSVSSNLAWYQQKPGQAPRLLIYGASTRAIGIPARFSGSGSGTEFTLTISLSQSEDFAVYYCQQLPYWPPITFGGGTKVEIK
- Ab2 – Light chain variable region (SEQ ID NO:245)
 EIVLTQSPATLSVSPGERATLSCRASQSVGSNLAWYQQKPGQAPRLLIYGASTRAIGIPARFSGSGSGTEFTLTISLSQSEDFAVYYCQQYFFYPPIFGGGTKVEIK
- Ab3 – Light chain variable region (SEQ ID NO:247)
 DIQMTQSPSSLSASVGDRVTITCQASQDSINYLNWYQQKPGKAPKLLIYDASNLAIGVPSRFSGSGSGTDFTITISLQPEDIAITYCQQPFNFYPPIFGGGTKVEIK
- Ab4 – Light chain variable region (SEQ ID NO:249)
 EIVMTQSPATLSVSPGERATLSCRASQSVSSNLAWYQQKPGQAPRLLIYASASTRAIGIPARFSGSGSGTEFTLTISLSQSEDFAVYYCQQDHDYPPITFGGGTKVEIK
- Ab5 – Light chain variable region (SEQ ID NO:251)
 EIVMTQSPGTLSLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYGASSRAIGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYFSSPPIFGGGTKVEIK
- Ab6 – Light chain variable region (SEQ ID NO:253)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYDASKRAIGIPARFSGSGSGTDFTLTISLLEPEDFAVYYCQQRVNLPPIFGGGTKVEIK
- Ab7 – Light chain variable region (SEQ ID NO:255)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYDASKRAIGIPARFSGSGSGTDFTLTISLLEPEDFAVYYCQQRISYPPIFGGGTKVEIK
- Ab8 – Light chain variable region (SEQ ID NO:257)
 DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYGASSLSQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQIDDTPITFGGGTKVEIK
- Ab9 – Light chain variable region (SEQ ID NO:259)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISLLEPEDFAVYYCQQFSYWPWITFGGGTKVEIK
- Ab10 – Light chain variable region (SEQ ID NO:261)
 EIVLTQSPGTLSLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYGASSRAIGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQHDSPPITFGGGTKVEIK

FIG. 20B

- Ab11 – Light chain variable region (SEQ ID NO:263)
 EIVLTQSPGTL~~SL~~SPGERATL~~SCR~~ASQSVSSDYLA~~WY~~QQKPGQAPRL~~LY~~GASSRA~~IG~~IPDRFSGSGGTDF~~IL~~TISRLEPEDFA~~VYY~~CQODYSYPWF~~GGG~~TKVEIK
- Ab12 – Light chain variable region (SEQ ID NO:265)
 DIQMTQSPSSLASVGD~~RV~~TIITCRASQSISSYLN~~WY~~QQKPGKAPKLL~~LY~~AASSLQSGVPSRFSGSGGTDF~~IL~~TISSLPEDFA~~VYY~~CQOEYAVPY~~IF~~GGGTKVEIK
- Ab13 – Light chain variable region (SEQ ID NO:267)
 EIVLTQSPATL~~SL~~SPGERATL~~SCR~~ASQSVSSYLA~~WY~~QQKPGQAPRL~~LY~~DA~~SN~~RA~~IG~~IPARFSGSGGTDF~~IL~~TISSLEPEDFA~~VYY~~CQQVSNYP~~IF~~GGGTKVEIK
- Ab14 – Light chain variable region (SEQ ID NO:269)
 DIQMTQSPSSLASVGD~~RV~~TIITCQASQDISNYLN~~WY~~QQKPGKAPKLL~~LY~~DA~~SN~~LE~~IG~~VPSRFSGSGGTDF~~IFT~~TISSLPEDIA~~TY~~YCQQVDN~~IP~~PF~~IF~~GGGTKVEIK
- Ab15 – Light chain variable region (SEQ ID NO:270)
 DIQMTQSPSSLASVGD~~RV~~TIITCQASQDISNYLN~~WY~~QQKPGKAPKLL~~LY~~DA~~SN~~LE~~IG~~VPSRFSGSGGTDF~~IFT~~TISSLPEDIA~~TY~~YCQQFD~~TY~~PF~~IF~~GGGTKVEIK
- Ab16 – Light chain variable region (SEQ ID NO:272)
 DIQMTQSPSSLASVGD~~RV~~TIITCQASQDISNYLN~~WY~~QQKPGKAPKLL~~LY~~DA~~SN~~LE~~IG~~VPSRFSGSGGTDF~~IFT~~TISSLPEDIA~~TY~~YCQQFLN~~FP~~IF~~IF~~GGGTKVEIK
- Ab17 – Light chain variable region (SEQ ID NO:273)
 DIQMTQSPSSLASVGD~~RV~~TIITCQASQDISNYLN~~WY~~QQKPGKAPKLL~~LY~~DA~~SN~~LE~~IG~~VPSRFSGSGGTDF~~IFT~~TISSLPEDIA~~TY~~YCQQFFN~~FP~~IF~~IF~~GGGTKVEIK
- Ab18 – Light chain variable region (SEQ ID NO:275)
 DIQMTQSPSSLASVGD~~RV~~TIITCQASQDISNYLN~~WY~~QQKPGKAPKLL~~LY~~DA~~SN~~LE~~IG~~VPSRFSGSGGTDF~~IFT~~TISSLPEDIA~~TY~~YCQQFID~~LP~~PF~~IF~~GGGTKVEIK
- Ab19 – Light chain variable region (SEQ ID NO:276)
 DIQMTQSPSSLASVGD~~RV~~TIITCQASQDISNYLN~~WY~~QQKPGKAPKLL~~LY~~DA~~SN~~LE~~IG~~VPSRFSGSGGTDF~~IFT~~TISSLPEDIA~~TY~~YCQQYYD~~LP~~PF~~IF~~GGGTKVEIK
- Ab20 – Light chain variable region (SEQ ID NO:278)
 EIVLTQSPGTL~~SL~~SPGERATL~~SCR~~ASQSVSSDYLA~~WY~~QQKPGQAPRL~~LY~~GASSRA~~IG~~IPDRFSGSGGTDF~~IL~~TISRLEPEDFA~~VYY~~CQQFSSHP~~FP~~IF~~IF~~GGGTKVEIK

FIG. 20B (Cont.)

Ab22 – Light chain variable region (SEQ ID NO:279)
EIVMTQSPGTLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYGASSRAIGIPDRFSGSGGTDFTLTISRLEPEDFAVYYCQDDDRSPYTFGGGKVEIK

Ab23 – Light chain variable region (SEQ ID NO:281)
DIVMTQSPDSLAVSLGERATINCKSSQSVLYSSNNKNYLAWYQQKPGQPPKLLISWASTRESGVDPDRFSGSGGTDFTLTISSLQAEADVAVYYCQQAAYLPPIIFGGGKTKV
EIK

Ab24 – Light chain variable region (SEQ ID NO:283)
DIQMTQSPSSLSASVGDRTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGGTDFTLTISSLQPEDFATYYCQAFSPPPWTFGGGKVEIK

Ab25 – Light chain variable region (SEQ ID NO:285)
EIVLTQSPGTLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYGASSRAIGIPDRFSGSGGTDFTLTISRLEPEDFAVYYCQQDDRSPIFGGGKVEIK

Ab26 – Light chain variable region (SEQ ID NO:287)
EIVLTQSPATLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISSELEPEDFAVYYCQOEFDLPFTFGGGKVEIK

Ab27 – Light chain variable region (SEQ ID NO:289)
EIVLTQSPATLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISSELEPEDFAVYYCQOYNNFPPIFGGGKVEIK

Ab28 – Light chain variable region (SEQ ID NO:291)
EIVLTQSPATLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYDASKRAIGIPARFSGSGSGTDFTLTISSELEPEDFAVYYCQORYLRPIIFGGGKVEIK

Ab29 – Light chain variable region (SEQ ID NO:293)
EIVLTQSPGTLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYGASSRAIGIPDRFSGSGGTDFTLTISRLEPEDFAVYYCQQPGAVPIFGGGKVEIK

Ab30 – Light chain variable region (SEQ ID NO:295)
DIQMTQSPSSLSASVGDRTITCRASQSISSYLNWYQQKPGKAPKLLIYGASSLQSGVPSRFSGSGGTDFTLTISSLQPEDFATYYCQOYVYIPIIFGGGKVEIK

FIG. 20B (Cont.)

- Ab31 – Light chain variable region (SEQ ID NO:297)
 DIQLTQSPSSLSASVGDRTVTITCQASQDISNFLNWNWYQQKPGKAPKLLIYDASNLEITGVPSRFSGSGSGTDFITFTISSLQPEDIAIYYCQQPVLDLPFTIFGGGKVEIK
- Ab32 – Light chain variable region (SEQ ID NO:299)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFITLTISSELPEDFAVYYCQQYSEFPPIFGGGTKVEIK
- Ab33 – Light chain variable region (SEQ ID NO:301)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFITLTISSELPEDFAVYYCQODSSEFPPIFGGGTKVEIK
- Ab34 – Light chain variable region (SEQ ID NO:303)
 DIQMTQSPSSLSASVGDRTVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLSQGVPSRFSGSGSGTDFITLTISLQPEDFATYYCQOSDFPPWTFGGGKVEIK
- Ab35 – Light chain variable region (SEQ ID NO:305)
 DIQMTQSPSSLSASVGDRTVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLSQGVPSRFSGSGSGTDFITLTISLQPEDFATYYCQOGYSAPIIFGGGKVEIK
- Ab36 – Light chain variable region (SEQ ID NO:307)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFITLTISSELPEDFAVYYCQQLFDWPIFGGGTKVEIK
- Ab37 – Light chain variable region (SEQ ID NO:309)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFITLTISSELPEDFAVYYCQORAFLEIFGGGKVEIK
- Ab38 – Light chain variable region (SEQ ID NO:311)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFITLTISSELPEDFAVYYCQOIDFLPYTFGGGKVEIK
- Ab39 – Light chain variable region (SEQ ID NO:313)
 DIQMTQSPSSLSASVGDRTVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLSQGVPSRFSGSGSGTDFITLTISLQPEDFATYYCQOVYSPPIIFGGGKVEIK
- Ab40 – Light chain variable region (SEQ ID NO:314)
 DIQMTQSPSSLSASVGDRTVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLSQGVPSRFSGSGSGTDFITLTISLQPEDFATYYCQOQGYAAPPIFGGGKVEIK

FIG. 20B (Cont.)

- Ab41 – Light chain variable region (SEQ ID NO:316)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISLSEPEDFTVYYCQORYALPIITFGGGTKVEIK
- Ab42 – Light chain variable region (SEQ ID NO:318)
 EIVLTQSPGTLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYGASSRAIGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYASPPITFGGGTKVEIK
- Ab43 – Light chain variable region (SEQ ID NO:320)
 DIQMTQSPSSLSASVGDRTITCRASQISIRYLNWYQQKPGKAPKLLIYAASSLSQGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQVYSTPIITFGGGTKVEIK
- Ab44 – Light chain variable region (SEQ ID NO:321)
 EIVMTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDSSNRAIGIPARFSGSGSGTDFTLTISLSEPEDFAVYYCQQLVHWPTFGGGTKVEIK
- Ab45 – Light chain variable region (SEQ ID NO:323)
 EIVMTQSPATLSVSPGERATLSCRASQSVSSNLAWYQQKPGQAPRLLIYGASTRAIGIPARFSGSGSGTEFTLTISLQSEDFAVYYCQQLDDWFITFGGGTKVEIK
- Ab46 – Light chain variable region (SEQ ID NO:325)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDSSNRAIGIPARFSGSGSGTDFTLTISLSEPEDFAVYYCQQRSNYPITFGGGTKVEIK
- Ab47 – Light chain variable region (SEQ ID NO:327)
 EIVLTQSPGTLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISLSEPEDFAVYYCQQRILYPIITFGGGTKVEIK
- Ab48 – Light chain variable region (SEQ ID NO:328)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISLSEPEDFAVYYCQORAAAYPIITFGGGTKVEIK
- Ab49 – Light chain variable region (SEQ ID NO:329)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASKRAIGIPARFSGSGSGTDFTLTISLSEPEDFAVYYCQORTSHPIITFGGGTKVEIK
- Ab50 – Light chain variable region (SEQ ID NO:330)
 EIVLTQSPGTLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYGASSRAIGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYAGSPITFGGGTKVEIK

FIG. 20B (Cont.)

- Ab51 – Light chain variable region (SEQ ID NO:332)
 DIQMTQSPSSLSASVGDRVTITCRASQSSSYLNWYQQKPGKAPKLLIYAASSLSQSGVPSRFSGSGGTDFTLTISSLQPEDFATYYCQQFDDVFIFFGGGKVEIK
- Ab53 – Light chain variable region (SEQ ID NO:333)
 EIVLTQSPGTLISLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGGTDFTLTISSLQPEDFAVYYCQQYVNSPFIFFGGGKVEIK
- Ab54 – Light chain variable region (SEQ ID NO:334)
 DIQMTQSPSSLSASVGDRVTITCRASQSSSYLNWYQQKPGKAPKLLIYAASSLSQSGVPSRFSGSGGTDFTLTISSLQPEDFATYYCQSDDDPFIFFGGGKVEIK
- Ab55 – Light chain variable region (SEQ ID NO:336)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGGTDFTLTISSLQPEDFAVYYCQQLSTYPLIFFGGGKVEIK
- Ab56 – Light chain variable region (SEQ ID NO:338)
 EIVMTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGGTDFTLTISSLQPEDFAVYYCQQRSVYPIIFFGGGKVEIK
- Ab57 – Light chain variable region (SEQ ID NO:340)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASKRAIGIPARFSGSGGTDFTLTISSLQPEDFAVYYCQQVSLFPLIFFGGGKVEIK
- Ab58 – Light chain variable region (SEQ ID NO:342)
 DIQMTQSPSTLSASVGDRVTITCRASQSSSYLAWYQQKPGKAPKLLIYDASSLESQVPSRFSGSGGTDFTLTISSLQPEDFAVYYCQQLDYNYSPIIFFGGGKVEIK
- Ab59 – Light chain variable region (SEQ ID NO:344)
 DIQMTQSPSSLSASVGDRVTITCRASQSSSYLNWYQQKPGKAPKLLIYDASNLEIGVPSRFSGSGGTDFTLTISSLQPEDIAVYYCQQHIALPFIFFGGGKVEIK
- Ab60 – Light chain variable region (SEQ ID NO:346)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASKRAIGIPARFSGSGGTDFTLTISSLQPEDFAVYYCQQRASMPFIFFGGGKVEIK

FIG. 20B (Cont.)

- Ab61 – Light chain variable region (SEQ ID NO:348)
EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDSSNRAIGIPARFSGSGSGTDFTLTISLLEPEDFAVYYCQQAFNRPPTFGGGTKVEIK
- Ab62 – Light chain variable region (SEQ ID NO:350)
EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASKRAIGIPARFSGSGSGTDFTLTISLLEPEDFAVYYCQQSSVHPYITFGGGTKVEIK
- Ab63 – Light chain variable region (SEQ ID NO:352)
DIQMTQSPSSVSASVGDRTITCRASQGDIDSWLAWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISLQPEDFAVYYCQQAAYSLPPTFGGGTKVEIK
- Ab64 – Light chain variable region (SEQ ID NO:354)
EIVMTQSPATLSVSPGERATLSCRASQSVSSNLAWYQQKPGQAPRLLIYGASTRAIGIPARFSGSGSGTEFTLTISLQSEDFAVYYCQDDDDGYTFGGGTKVEIK
- Ab65 – Light chain variable region (SEQ ID NO:356)
EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISLLEPEDFAVYYCQODYSWPYTFGGGTKVEIK
- Ab66 – Light chain variable region (SEQ ID NO:358)
EIVLTQSPGTLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISLLEPEDFAVYYCQQRSAYPITFGGGTKVEIK
- Ab67 – Light chain variable region (SEQ ID NO:359)
EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISLLEPEDFAVYYCQQRSHFPITFGGGTKVEIK
- Ab68 – Light chain variable region (SEQ ID NO:361)
EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISLLEPEDFAVYYCQQRANYPTITFGGGTKVEIK
- Ab69 – Light chain variable region (SEQ ID NO:363)
EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISLLEPEDFAVYYCQQRADYPTITFGGGTKVEIK
- Ab70 – Light chain variable region (SEQ ID NO:364)
EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAIGIPARFSGSGSGTDFTLTISLLEPEDFAVYYCQQRSVYPTITFGGGTKVEIK

FIG. 20B (Cont.)

- Ab71 – Light chain variable region (SEQ ID NO:366)
 EIVMTQSPGTLSPGERATLSCRASQSVSSYLA WYQQKPGQAPRLIYGASNRAIGIPDRFSGSGGTDFTLTISRLEPEDFAVYYCQQAAGSHPFIFGGGKVEIK
- Ab72 – Light chain variable region (SEQ ID NO:368)
 DIQMTQSPSSLASVGDRTITTCQASQDIITNYLWYQQKPGKAPKLLIYDASNLEIGVPSRFSGSRSGTDFITISLQPEDIAITYCQQDVNYPPIFGGGKVEIK
- Ab73 – Light chain variable region (SEQ ID NO:370)
 EIVMTQSPATLSVSPGERATLSCRASQSVSSNLA WYQQKPGQAPRLIYGASTRAIGIPARFSGSGSGTEFTLTISLQSEDFAVYYCQQDDNYPYIFGGGKVEIK
- Ab74 – Light chain variable region (SEQ ID NO:371)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLA WYQQKPGQAPRLIYDASNRAIGIPARFSGSGSGTDFLTISLLEPEDFAVYYCQQRSTIPPIFGGGKVEIK
- Ab75 – Light chain variable region (SEQ ID NO:373)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLA WYQQKPGQAPRLIYDASNRAIGIPARFSGSGSGTDFLTISLLEPEDFAVYYCQQVSNYPPIFGGGKVEIK
- Ab76 – Light chain variable region (SEQ ID NO:375)
 DIVMTQSPDSLAVSLGERATINCKSSQSVLYSSNNKNYLA WYQQKPGQPPKLLIYWASTRESGVDPDRFSGSGGTDFLTITISLQAEDVAVYYCQQYHDAPIIFGGGKVEIK
- Ab77 – Light chain variable region (SEQ ID NO:377)
 DIVMTQSPDSLAVSLGERATINCKSSQSVLYSSNNKNYLA WYQQKPGQPPKLLIYWASTRESGVDPDRFSGSGGTDFLTITISLQAEDVAVYYCQQA YVVPPIFGGGTKVEIK
- Ab78 – Light chain variable region (SEQ ID NO:379)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLA WYQQKPGQAPRLIYDASNRAIGIPARFSGSGSGTDFLTITISLLEPEDFAVYYCQQADNWPPIFGGGKVEIK
- Ab79 – Light chain variable region (SEQ ID NO:381)
 DIVMTQSPSLPVPTPGEPASISCRSSQSLHSGNGYNLDWYLQKPGQSPQLLIYLGSHRASGVDPDRFSGSGGTDFLTILKISRVEAEDVGYYVYCMQALESPRIFGGGKVEIK
- Ab80 – Light chain variable region (SEQ ID NO:383)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLA WYQQKPGQAPRLIYDASNRAIGIPARFSGSGSGTDFLTITISLLEPEDFAVYYCQQYVNWPPPIFGGGKVEIK

FIG. 20B (Cont.)

Ab81 – Light chain variable region (SEQ ID NO:385)
 EIVLTQSPATLSLSPGERATLSCRASQSVSSYLAWYQQKPGQAPRLLIYDASNRAITGIPARFSGSGSGTDFTLTISLQPEDFAVYYCQQSSNWPWTFGGGKVEIK

Ab82 – Light chain variable region (SEQ ID NO:387)
 DIQMTQSPSSVSASVGDRVTITCRASQGISWLAWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQASTFPIIFGGGKVEIK

Ab83 – Light chain variable region (SEQ ID NO:389)
 DIQMTQSPSSVSASVGDRVTITCRASQGISWLAWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQRNLSPLTFGGGKVEIK

Ab84 – Light chain variable region (SEQ ID NO:390)
 DIQMTQSPSSVSASVGDRVTITCRASQISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQSYDFPIIFGGGKVEIK

Ab85 – Light chain variable region (SEQ ID NO:392)
 DIQMTQSPSSVSASVGDRVTITCRASQDISWLAWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQEVDYPPLIFGGGKVEIK

Ab86 – Light chain variable region (SEQ ID NO:394)
 DIQMTQSPSTLSASVGDRVTITCRASQISWLAWYQQKPGKAPKLLIYKASSLESQVPSRFSGSGSGTEFTLTISLQPDDEFATYYCQQLNYSYSPIFGGGKVEIK

Ab87 – Light chain variable region (SEQ ID NO:396)
 EIVLTQSPATLSLSPGERATLSCRASQSVSRYLAWYQQKPGQAPRLLIYDASNRAITGIPARFSGSGSGTDFTLTISLQPEDFAVYYCQQYIFWPPIFGGGKVEIK

FIG. 20B (Cont.)

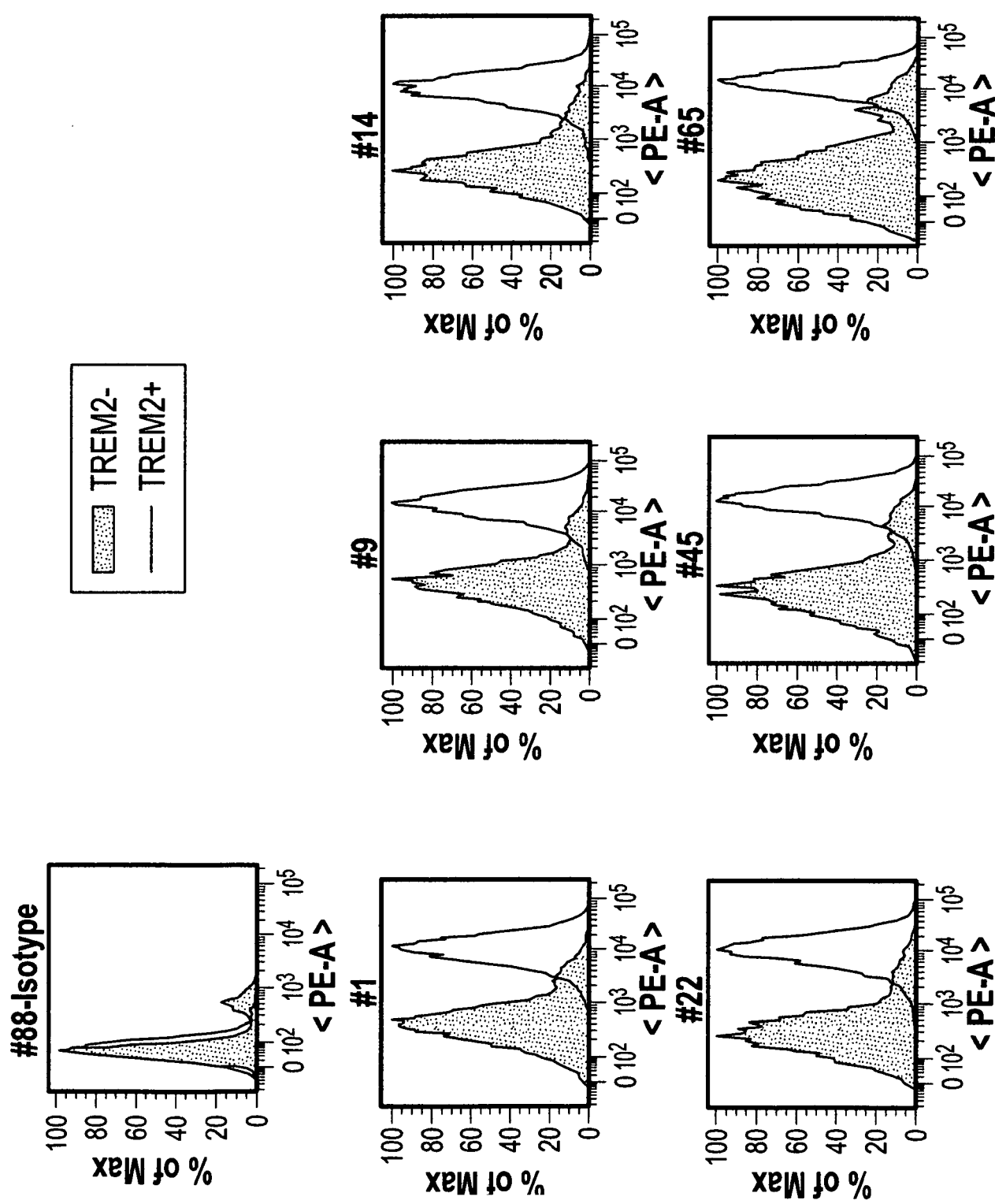


FIG. 21A

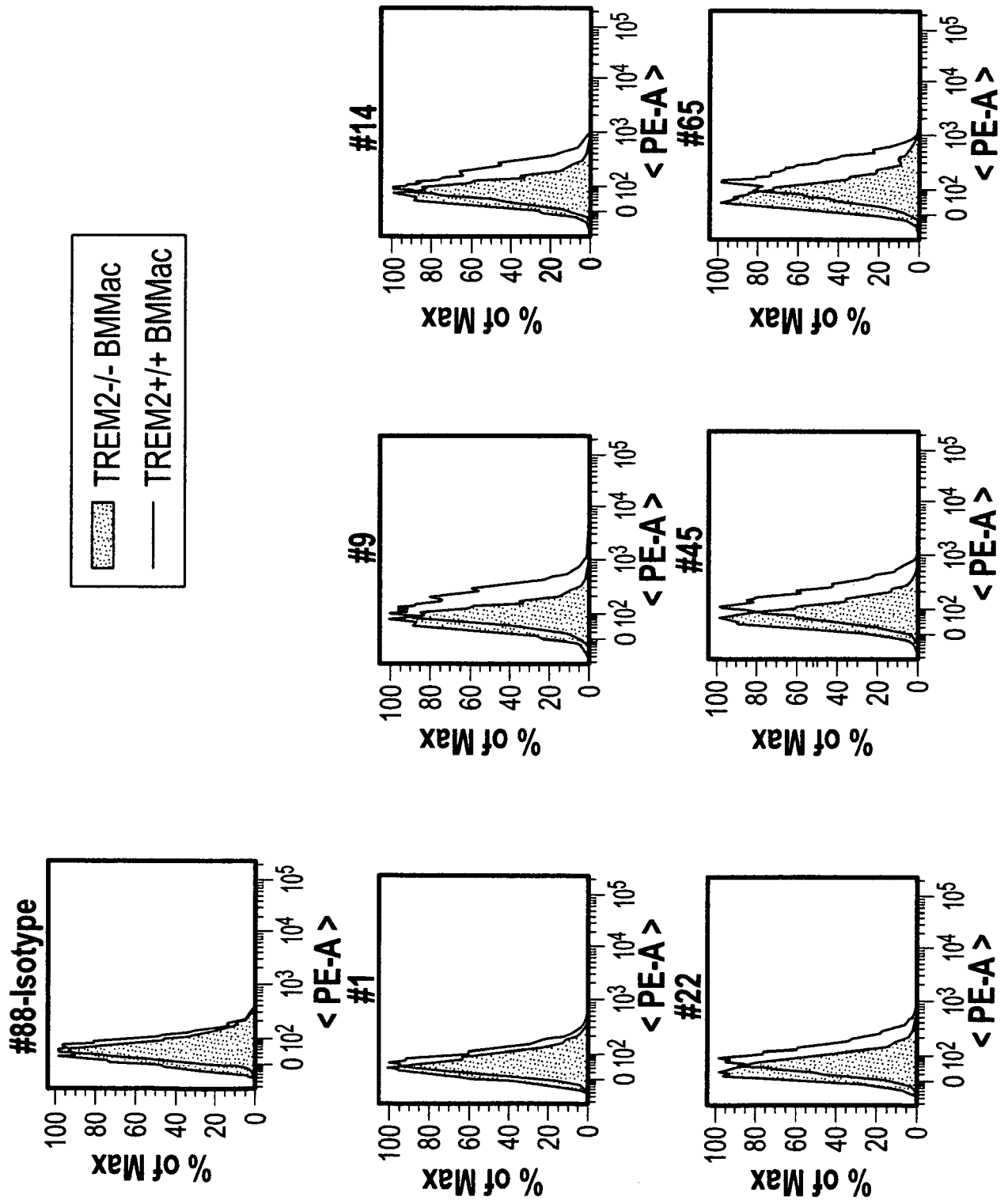


FIG. 21B

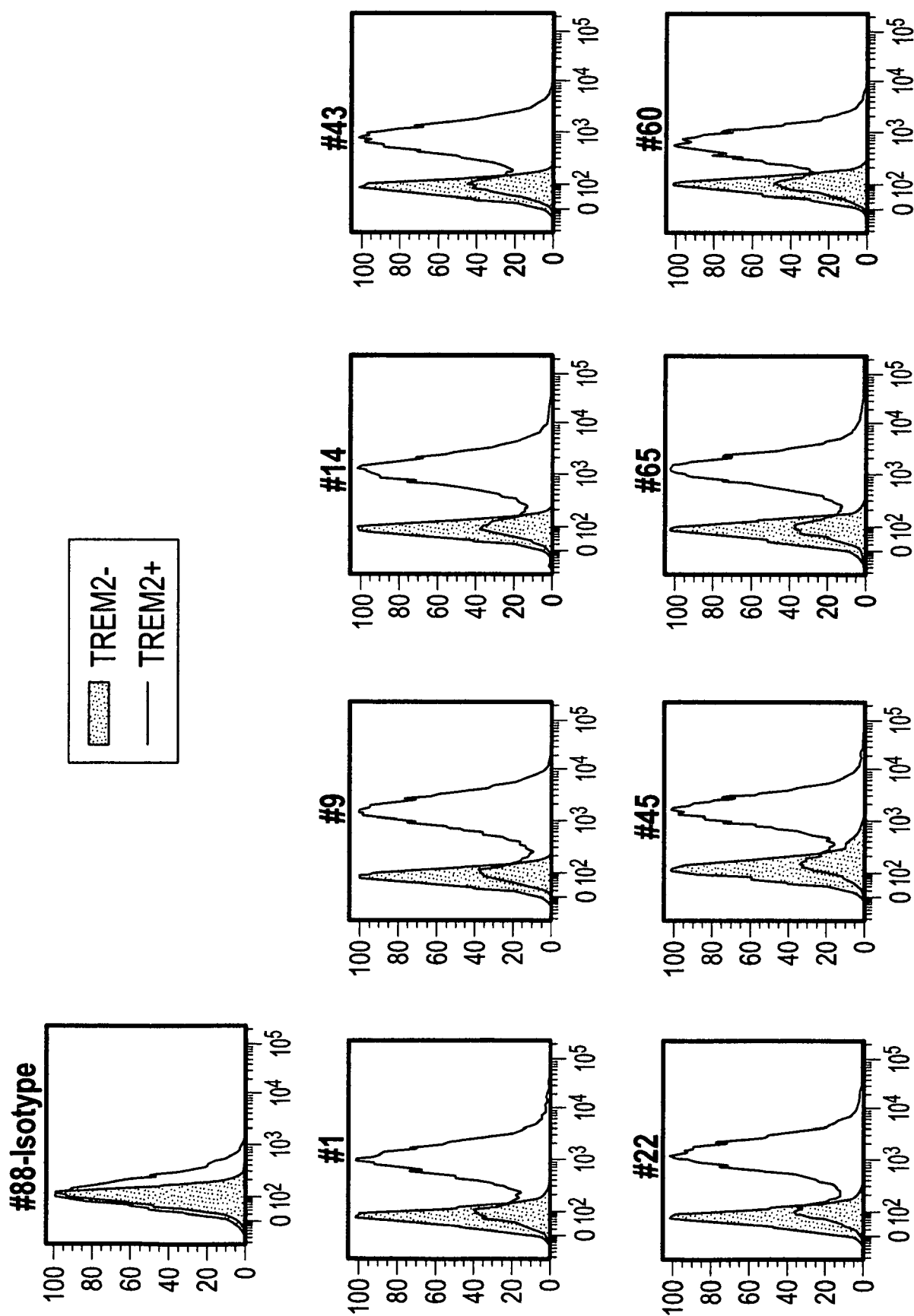


FIG. 22A

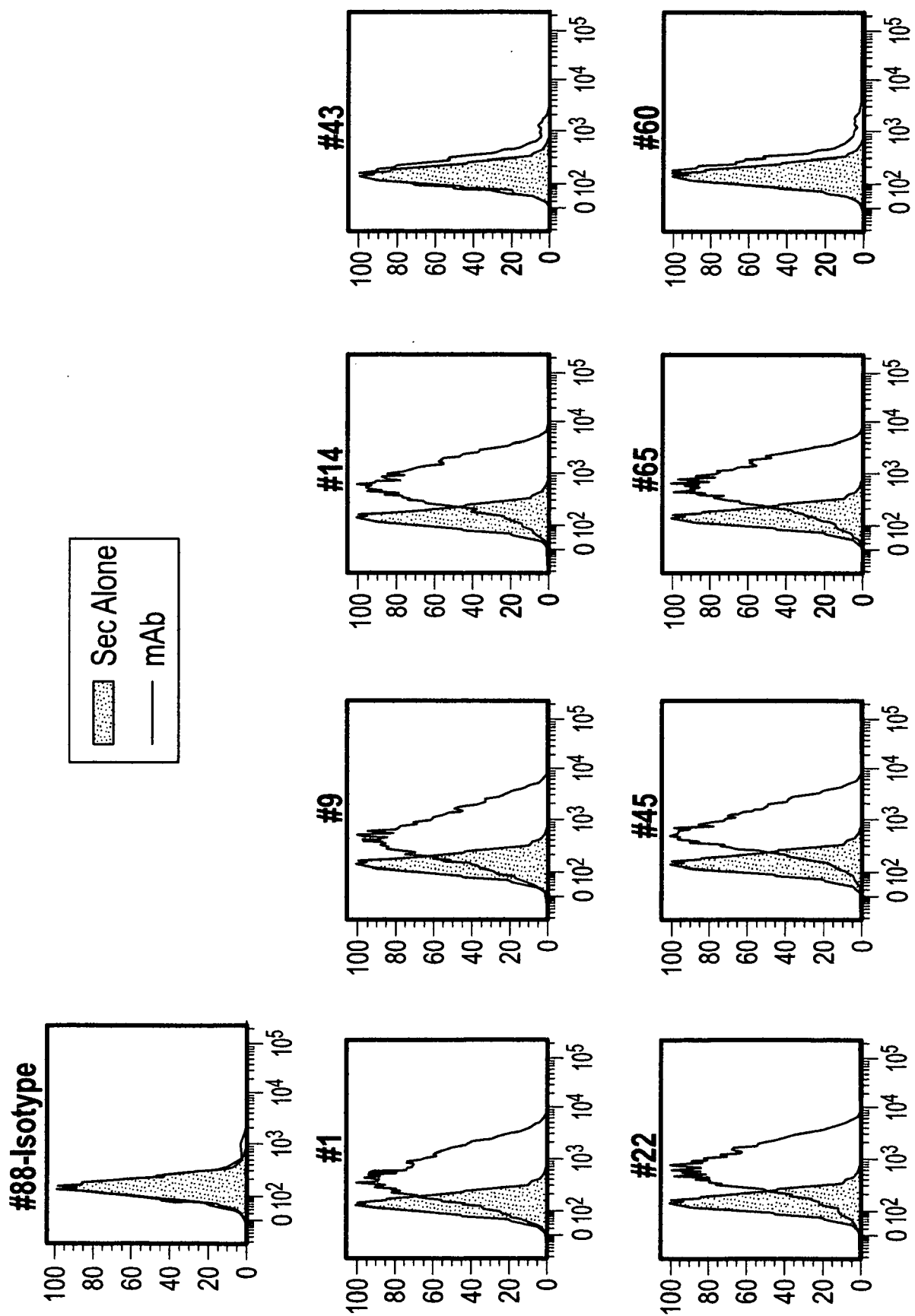
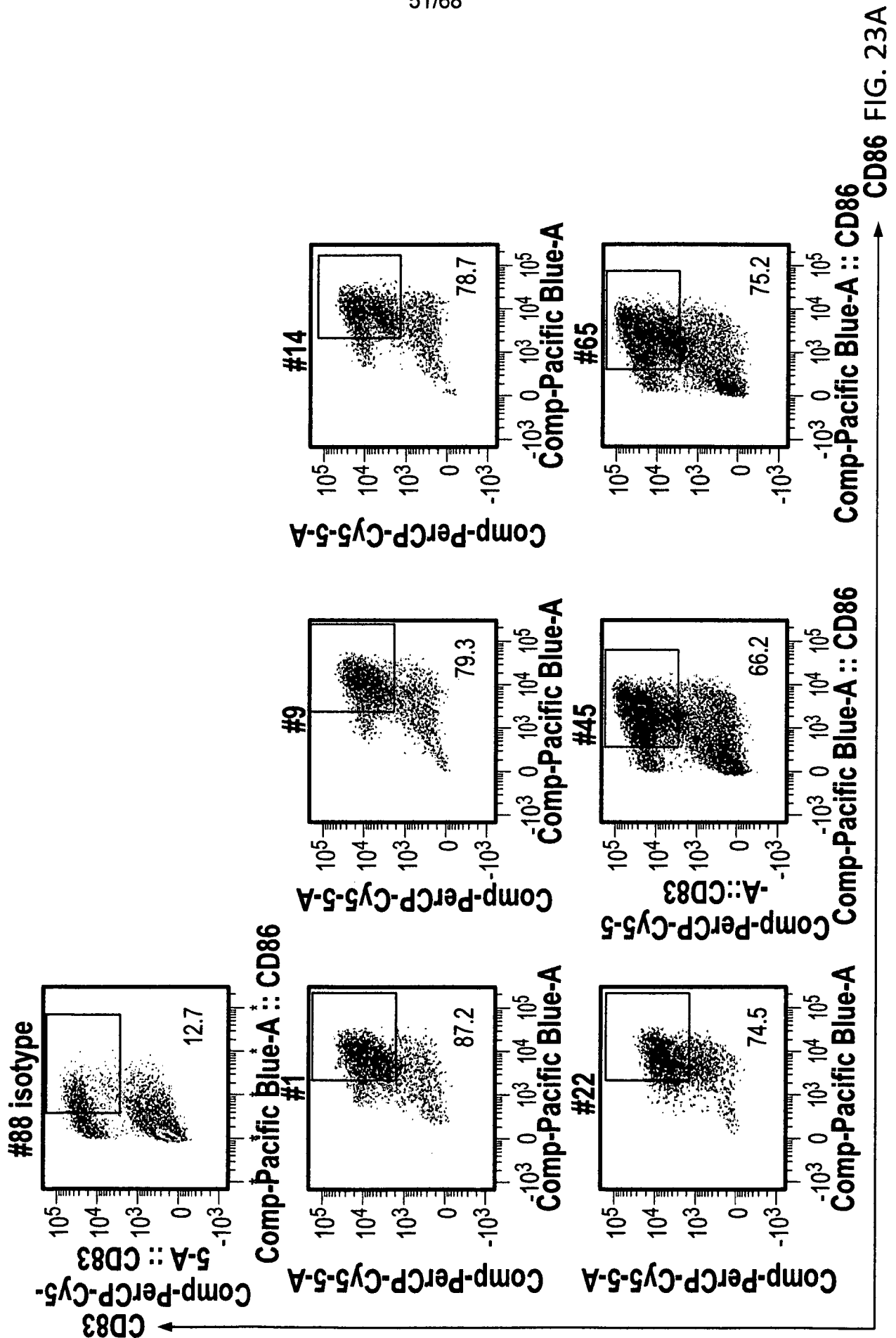


FIG. 22B



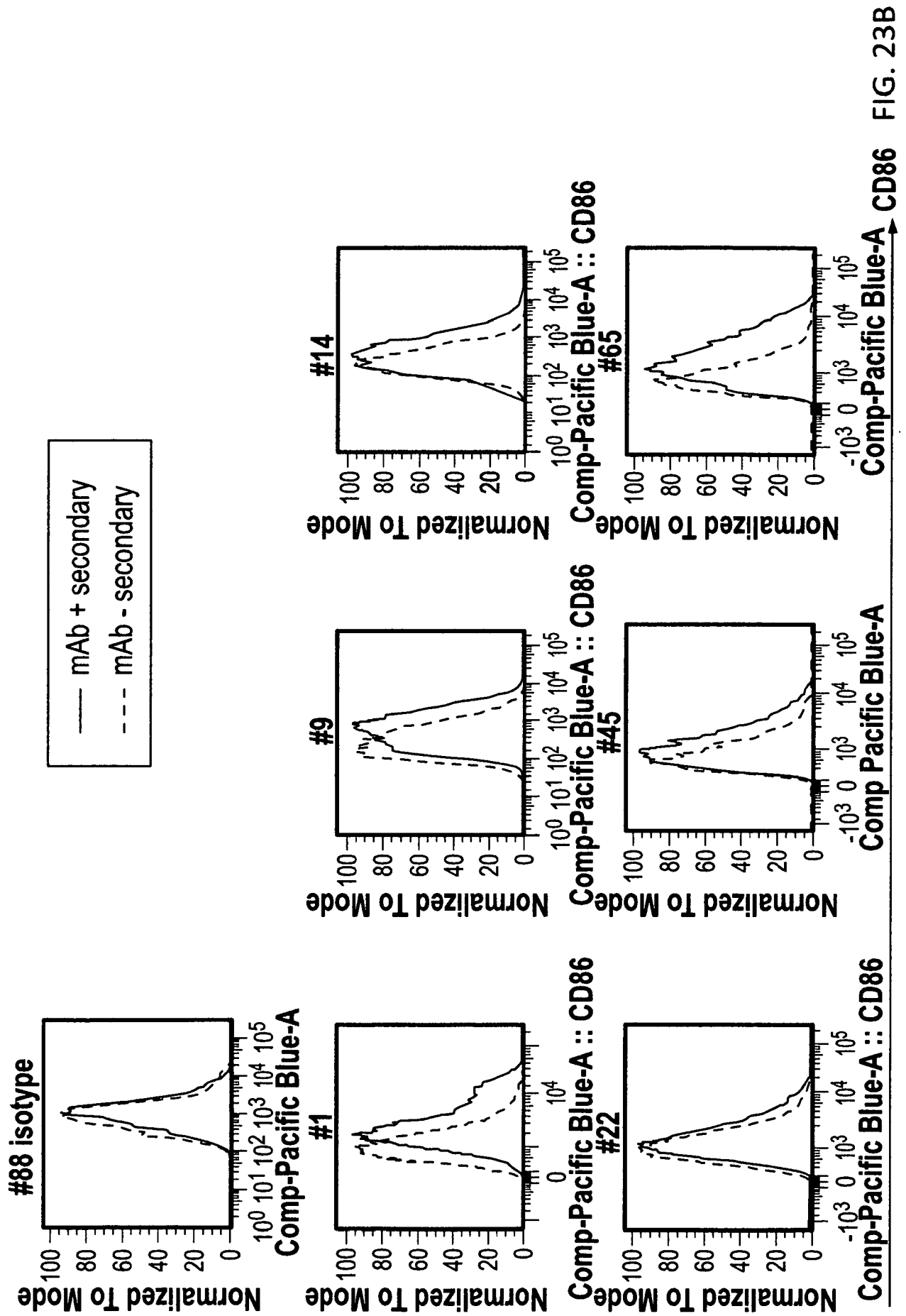


FIG. 23B

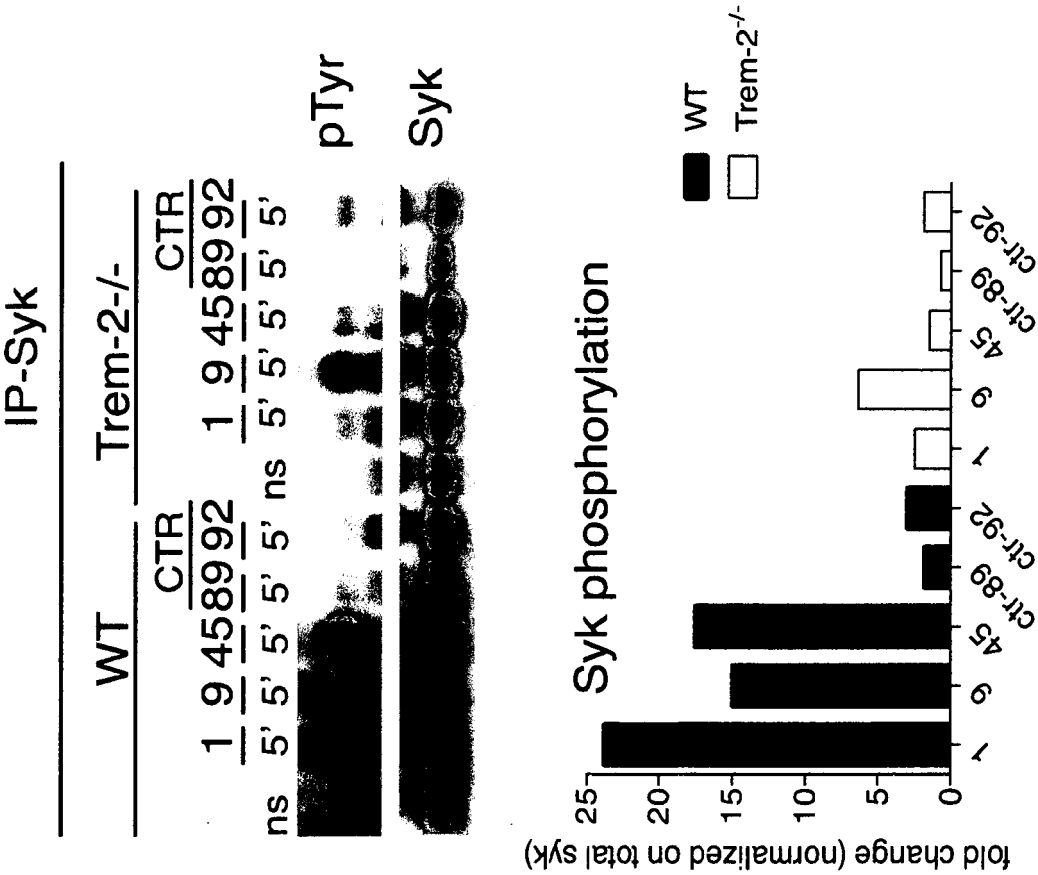


FIG. 24A

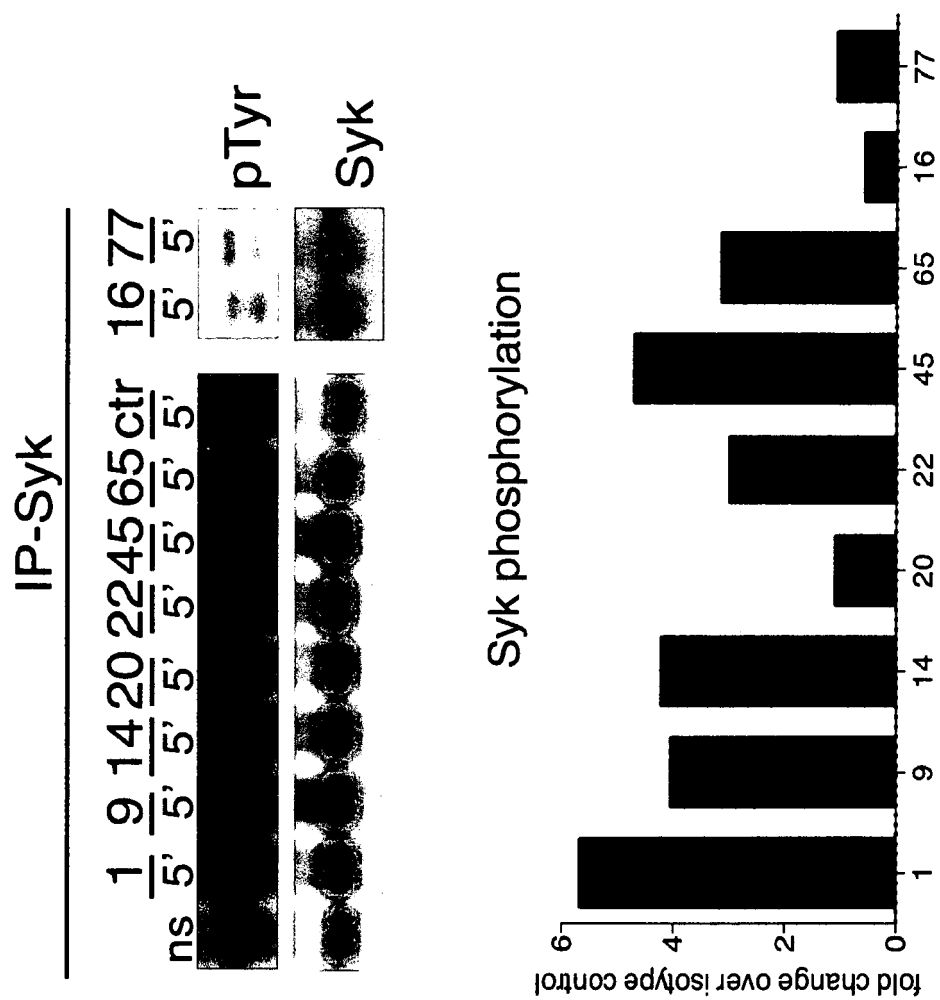


FIG. 24B

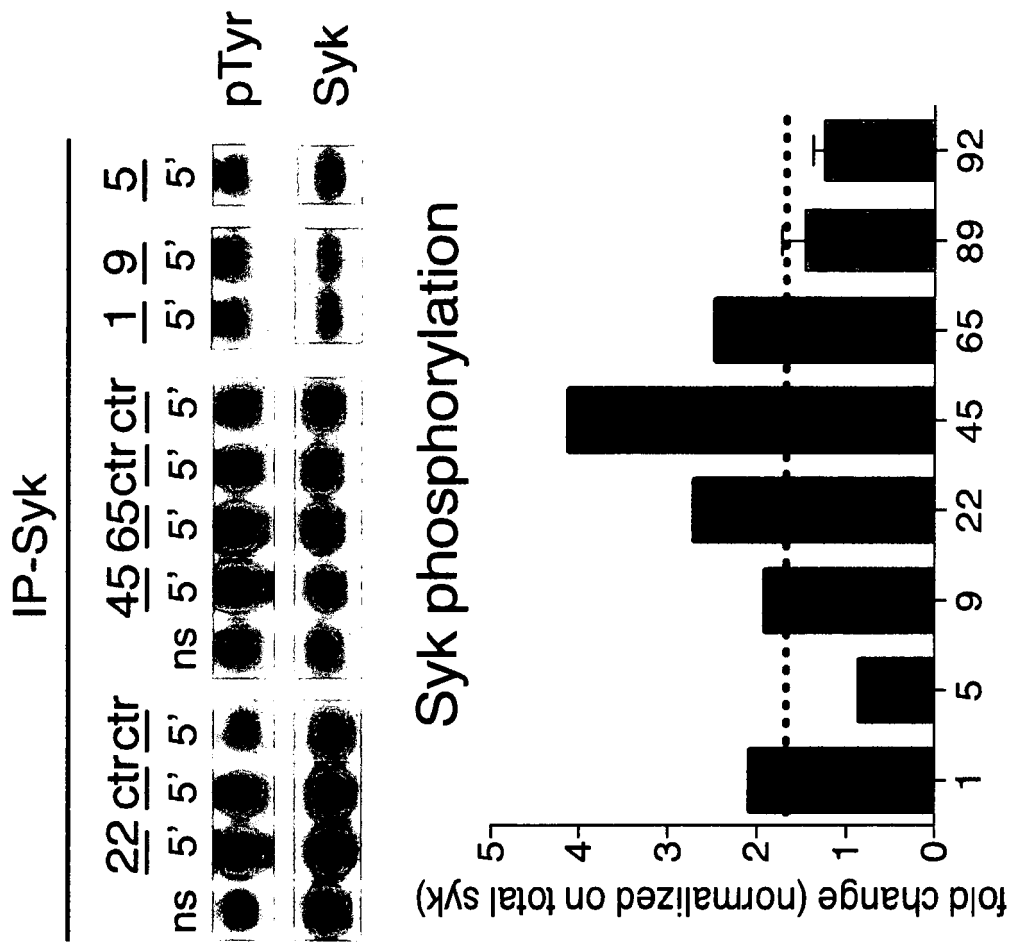


FIG. 24C

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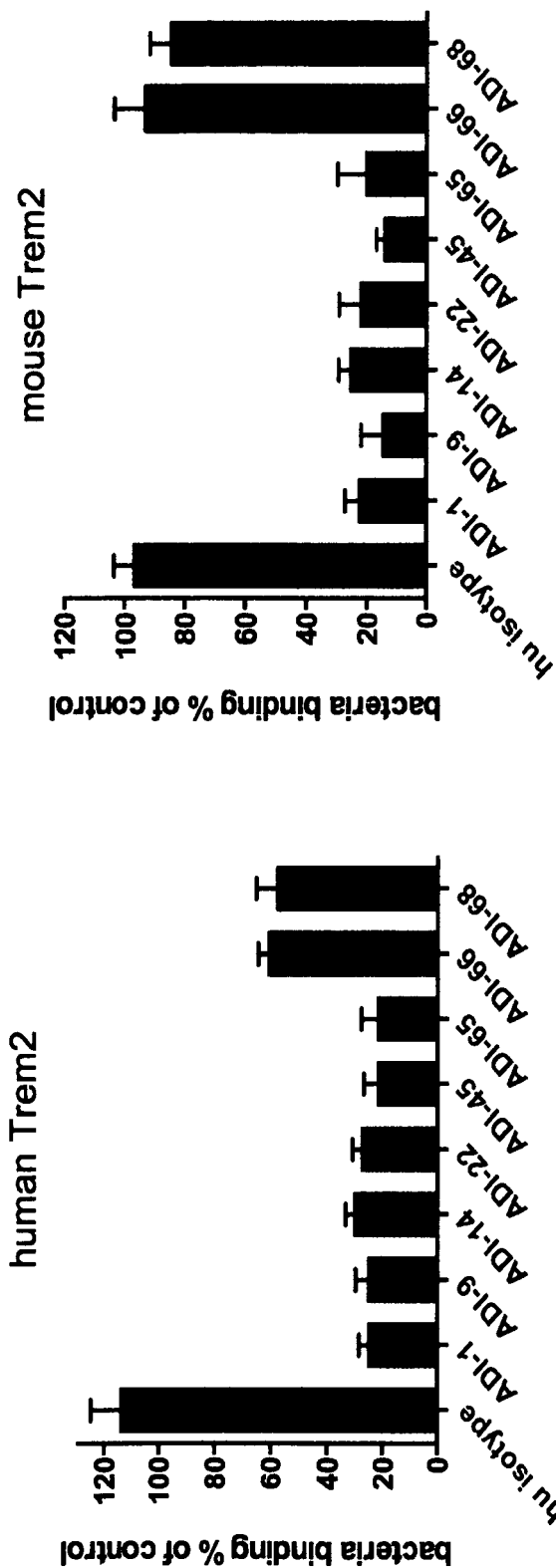


FIG. 25

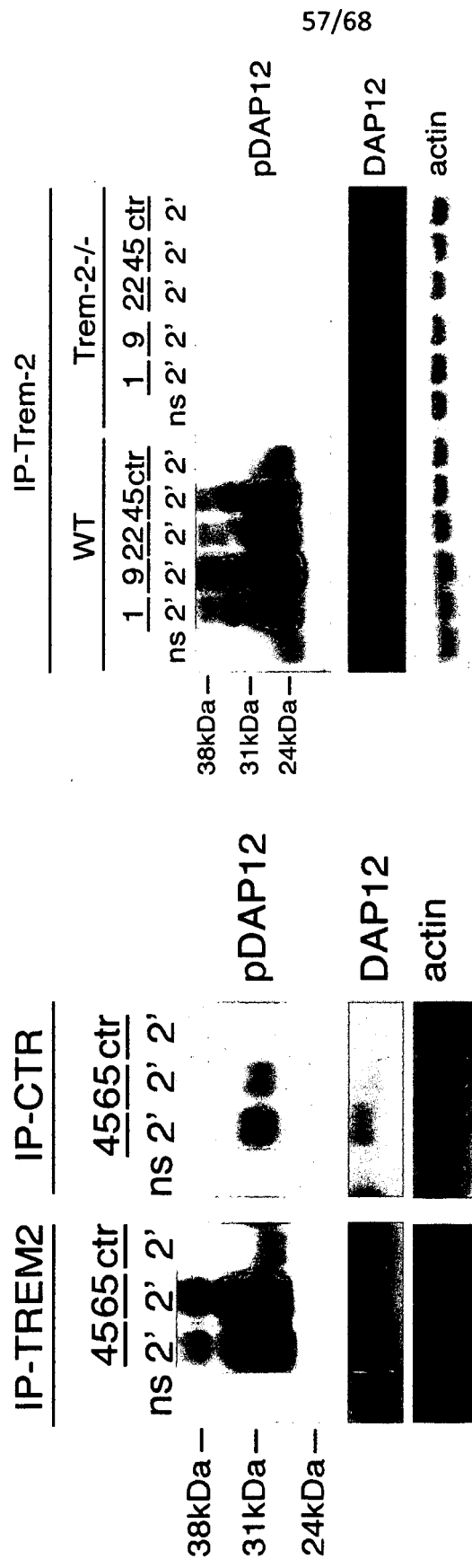


FIG. 26A

FIG. 26B

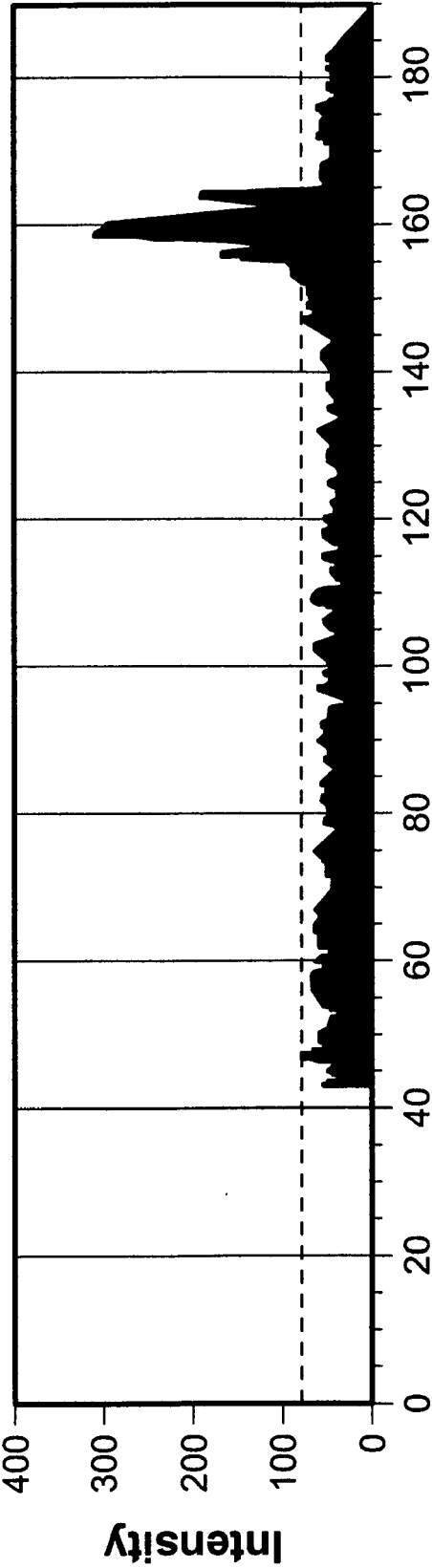


FIG. 27A

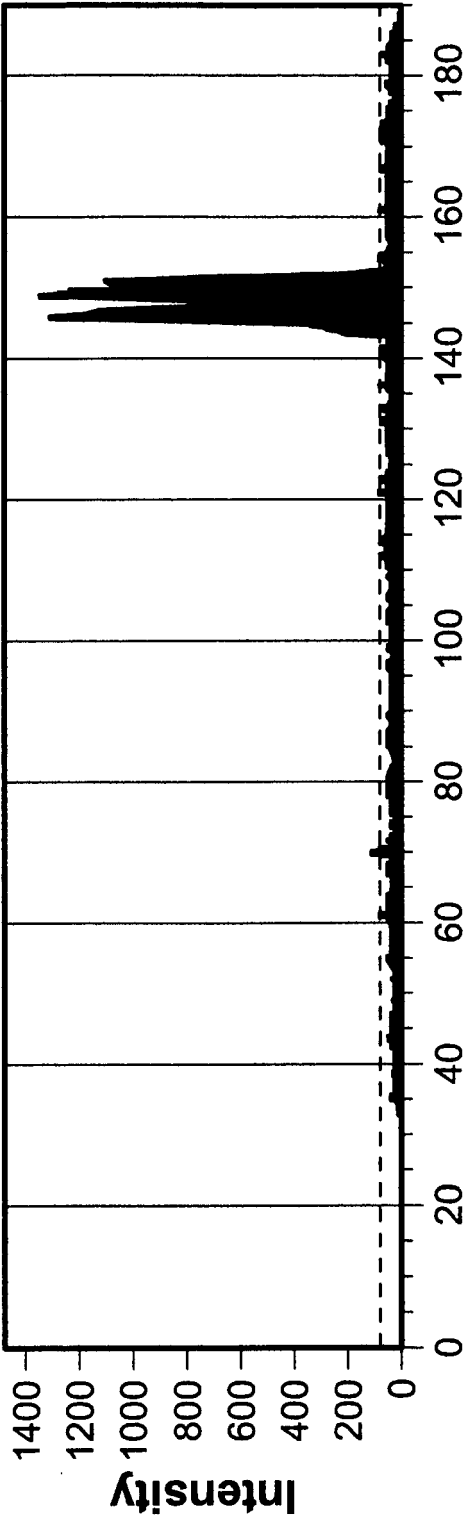


FIG. 27B

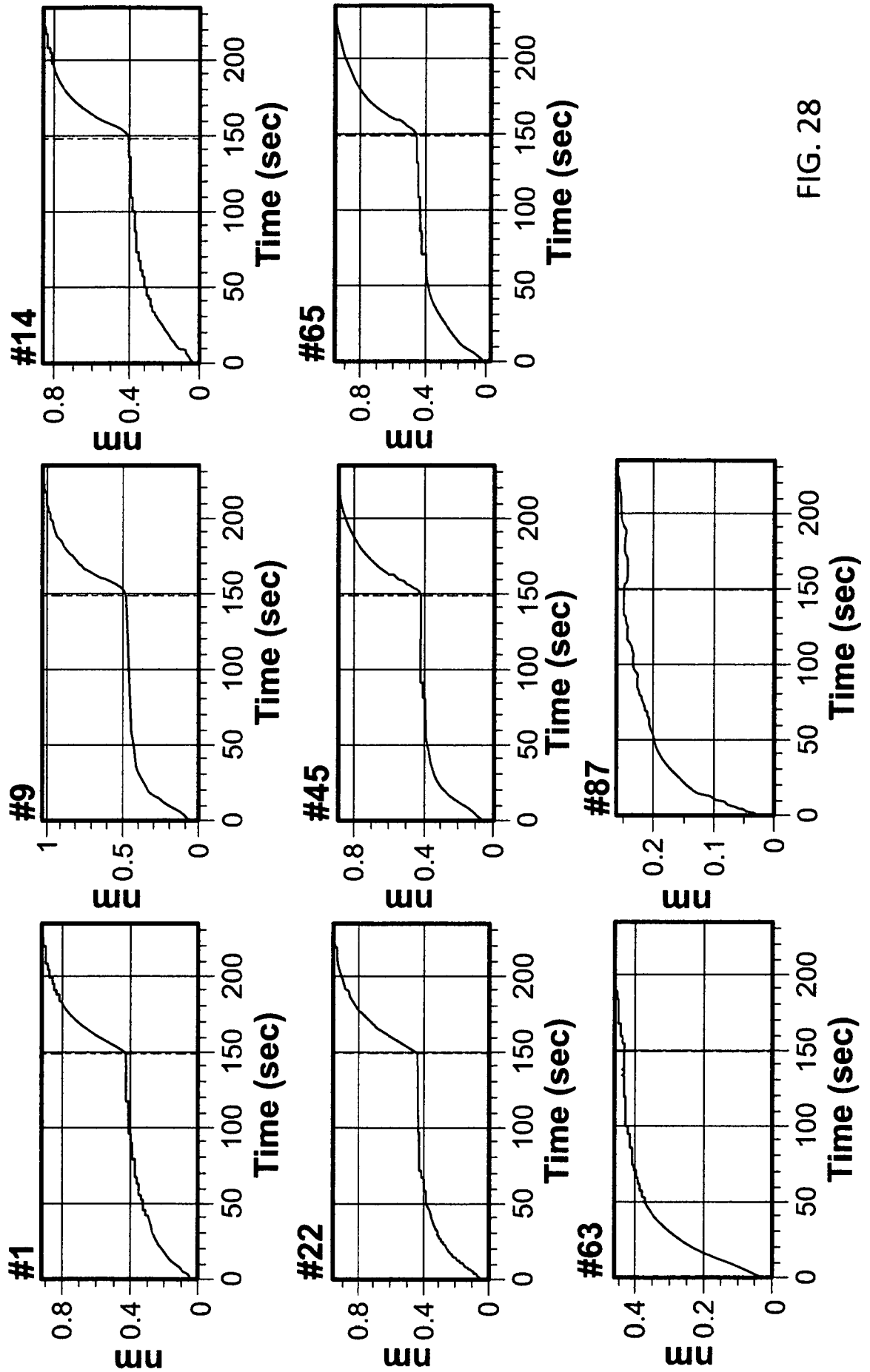


FIG. 28

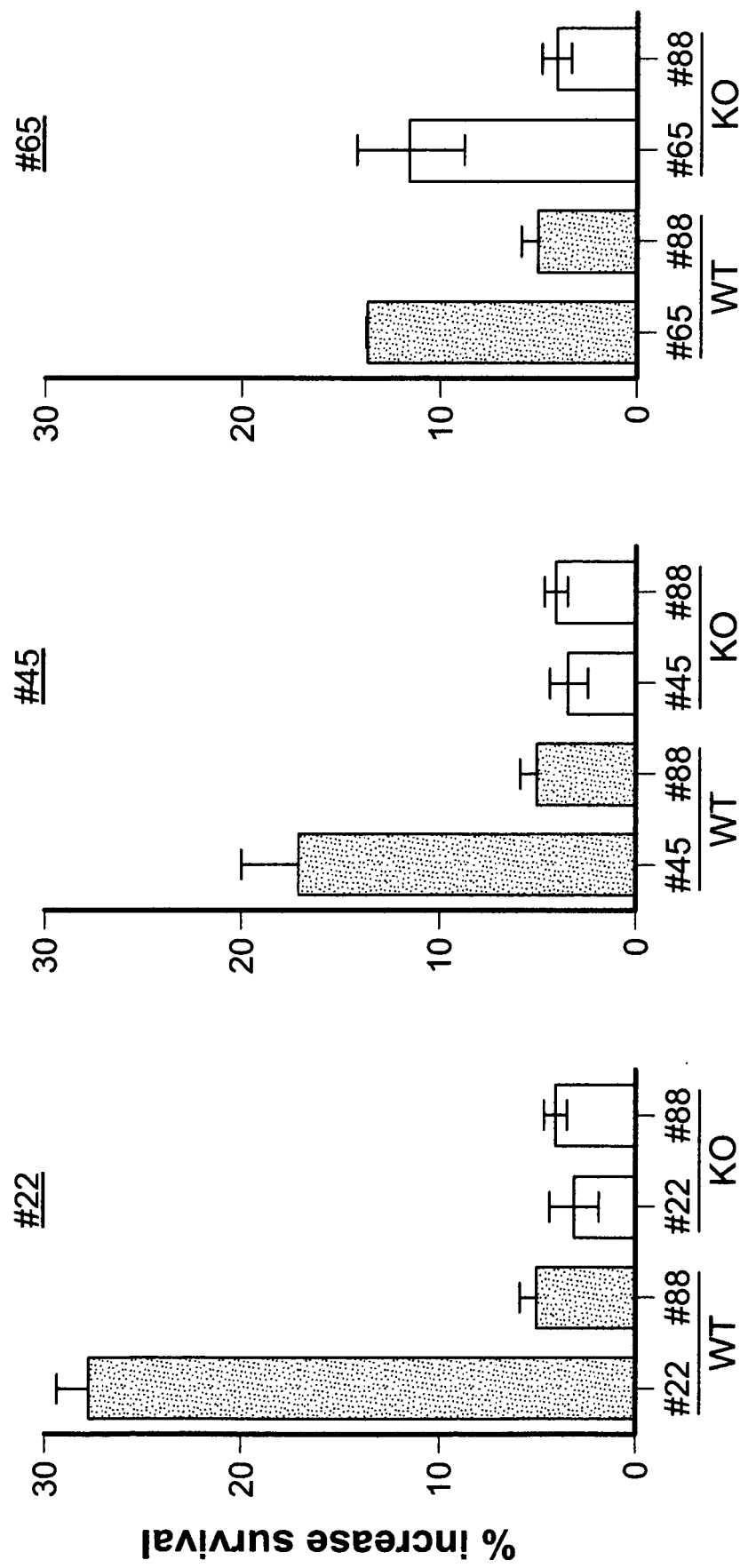


FIG. 29

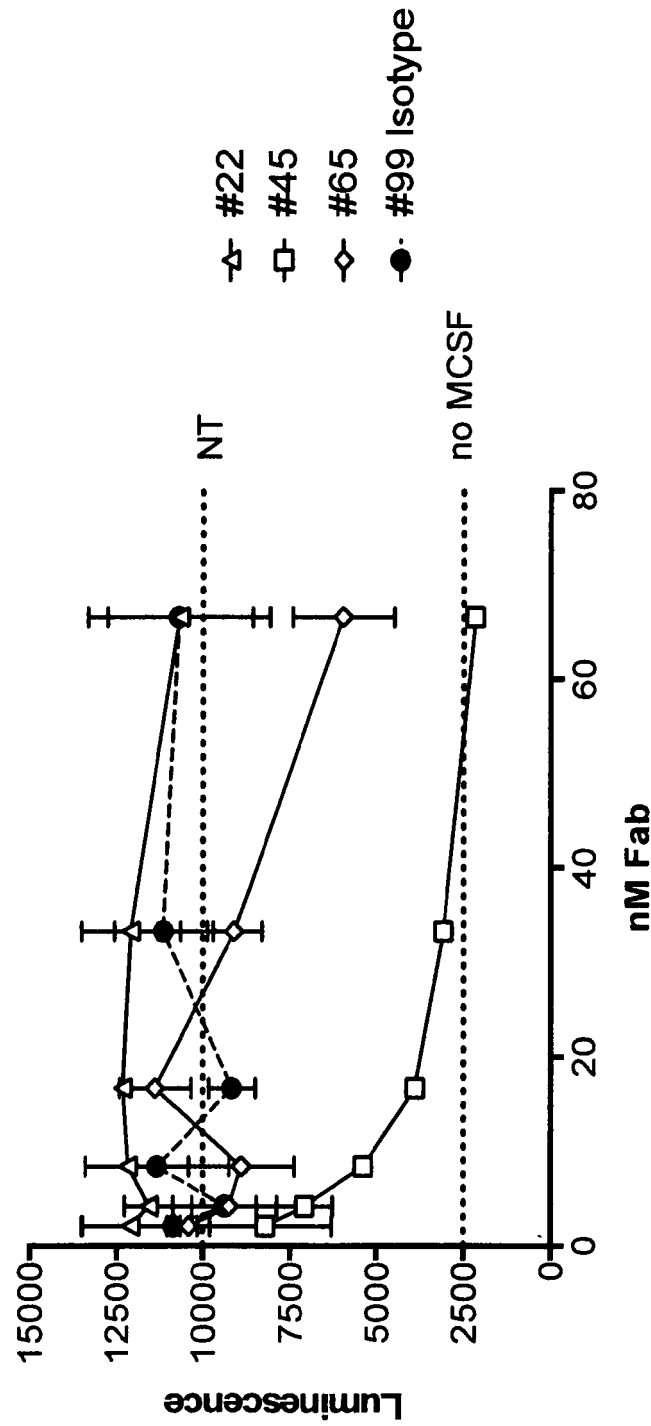


FIG. 30A

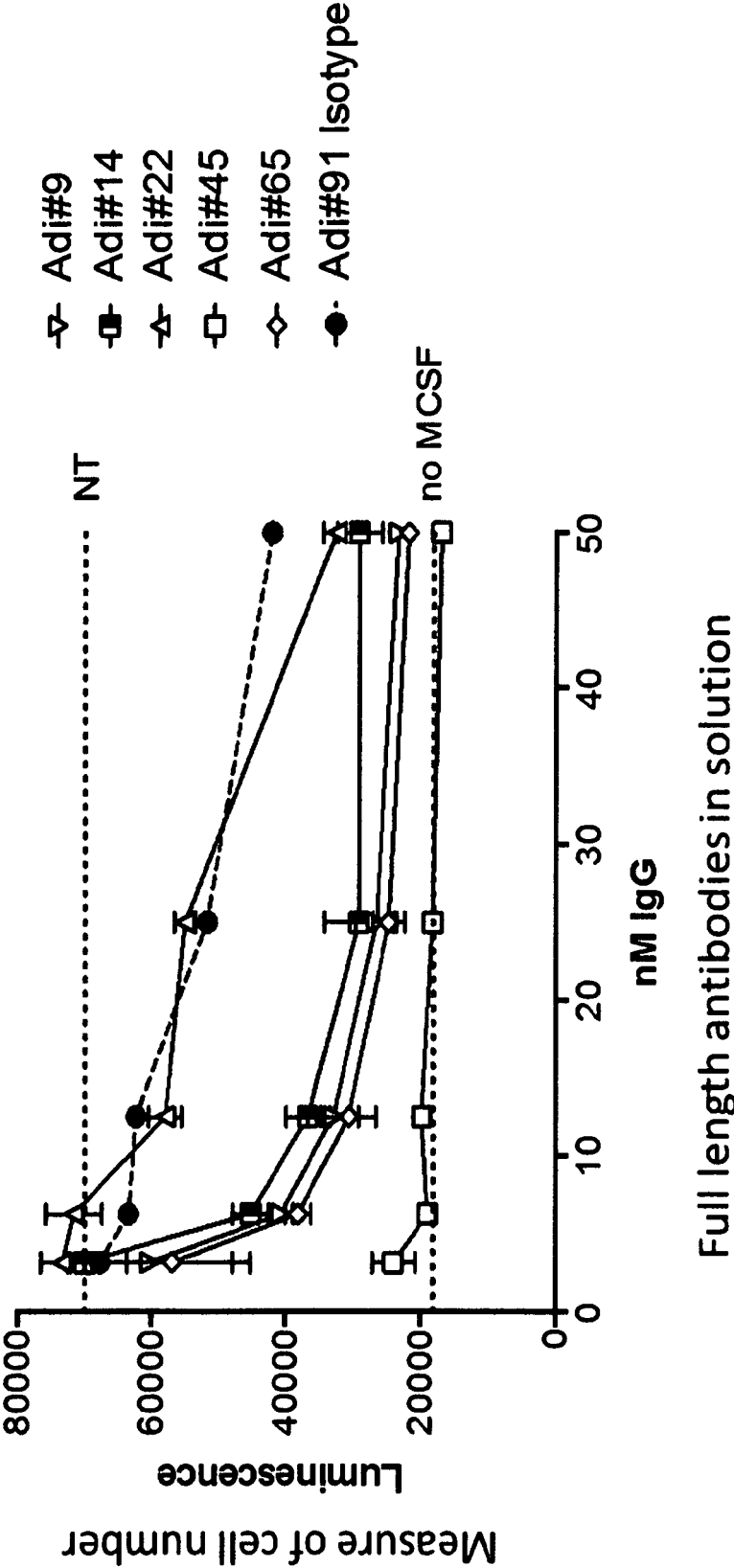


FIG. 30B

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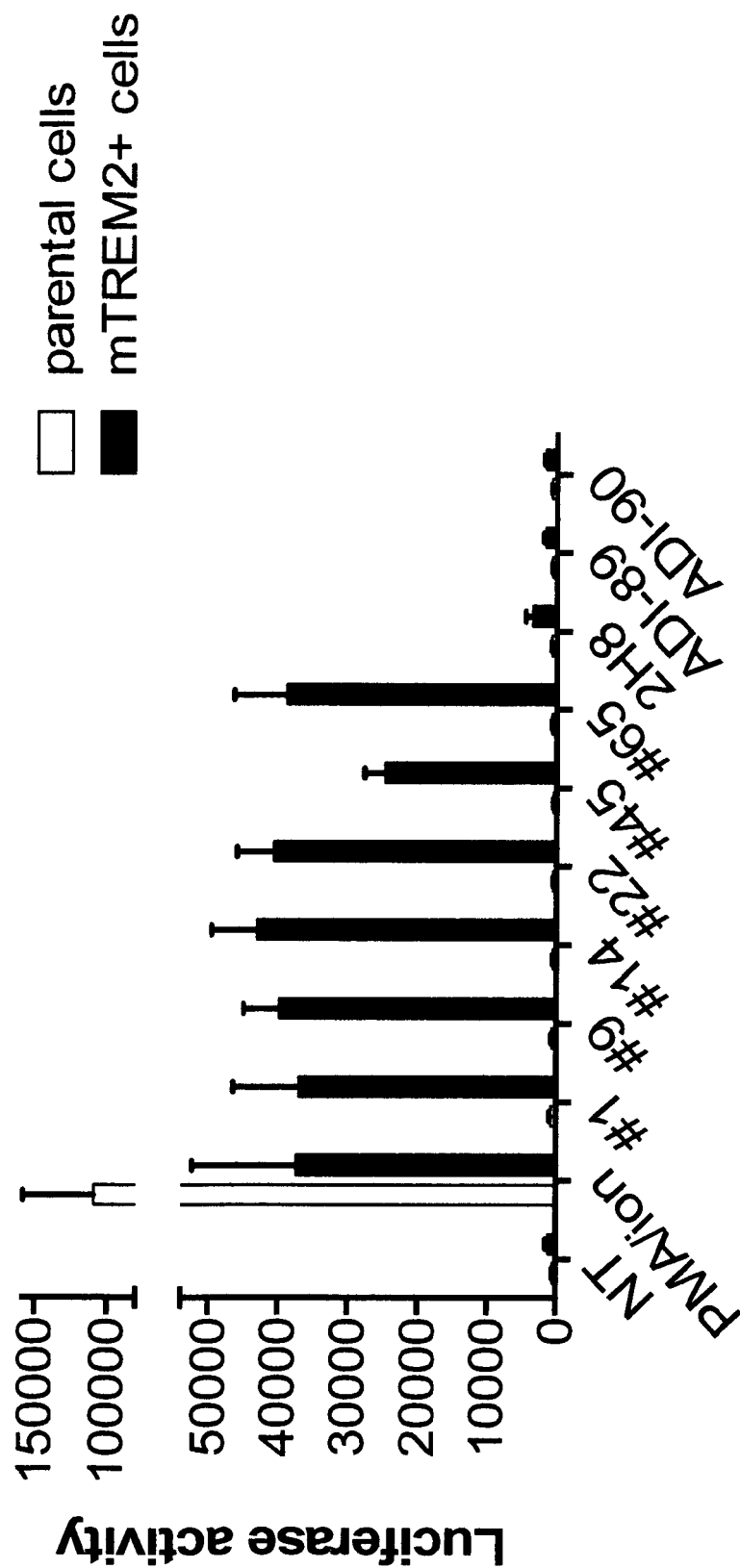


FIG. 31A

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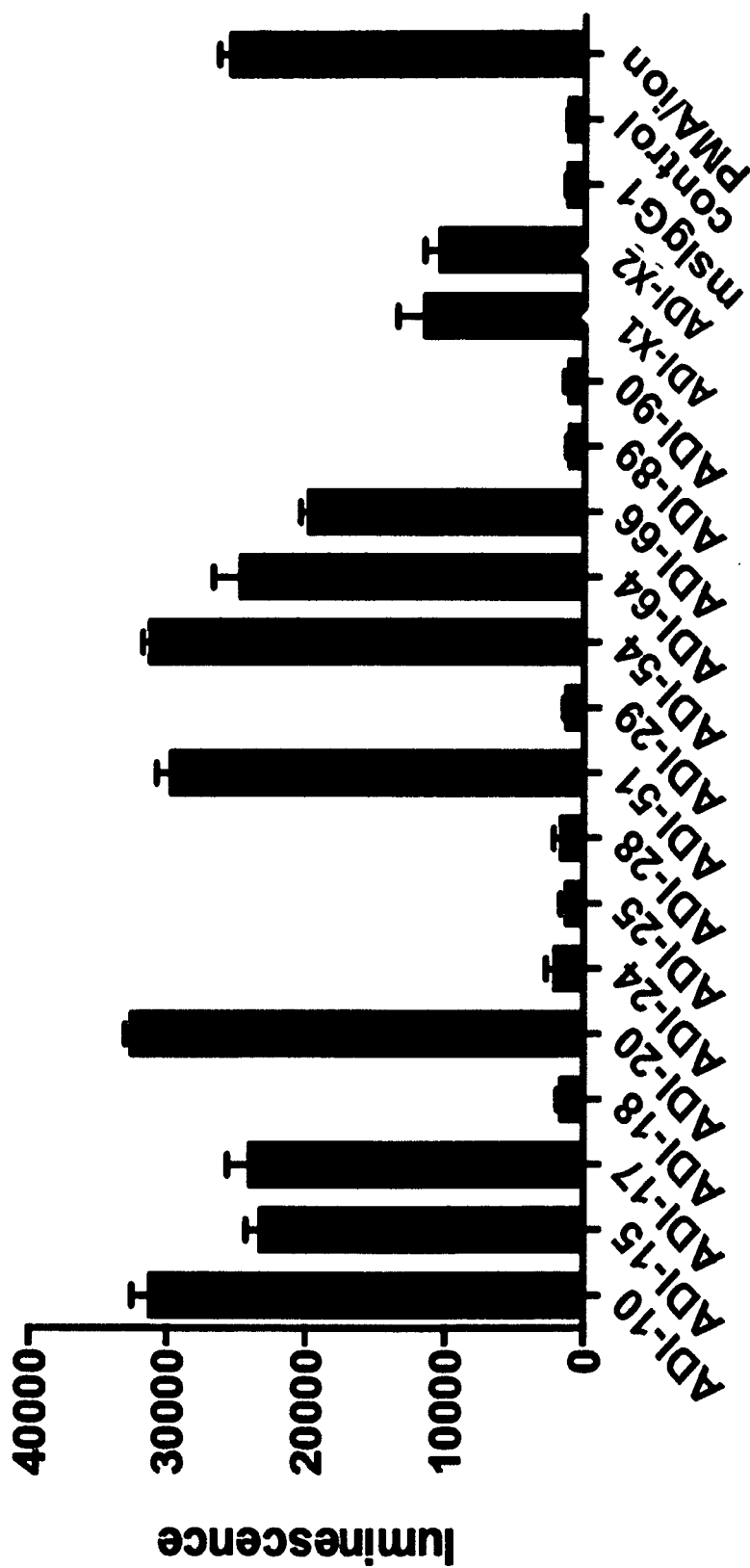


FIG. 31B

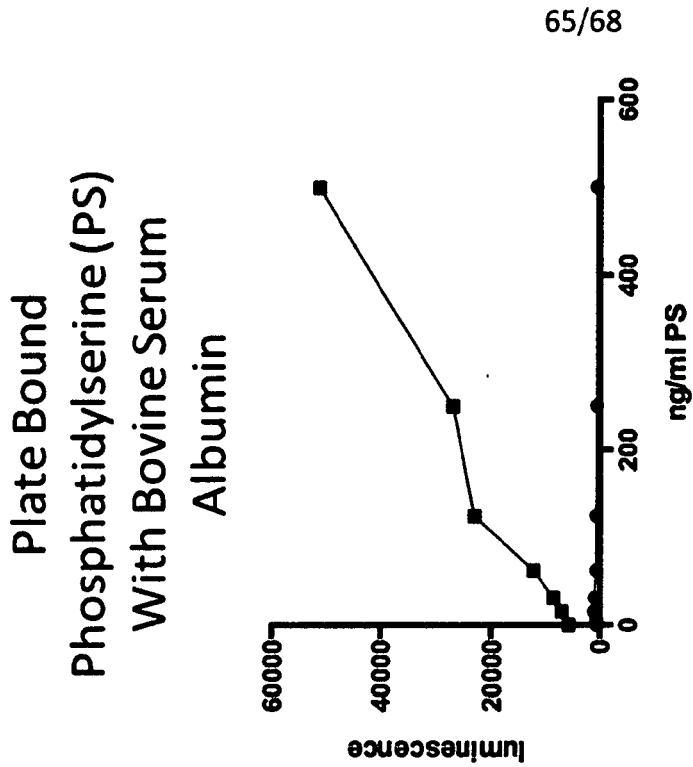
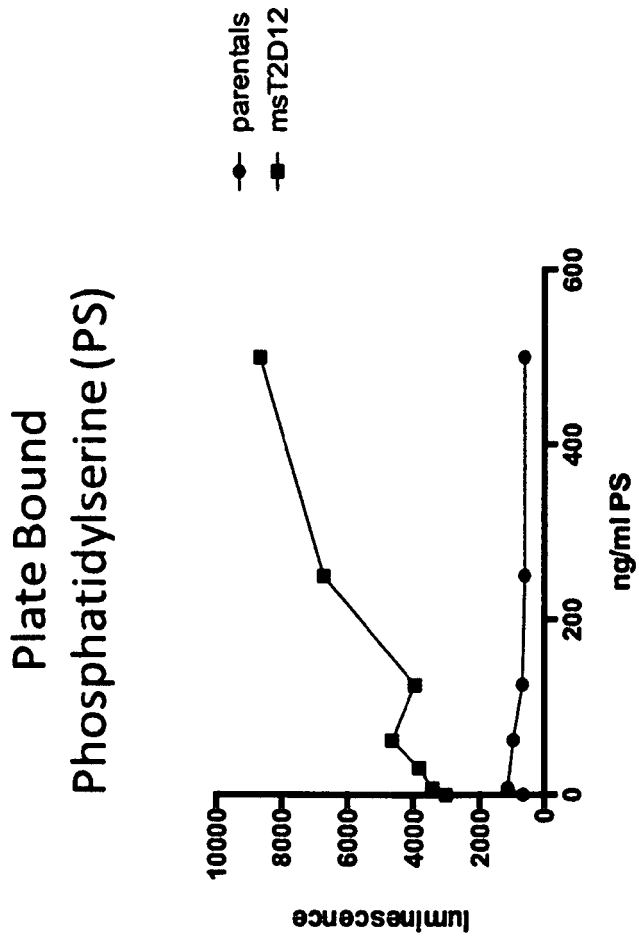


FIG. 31C

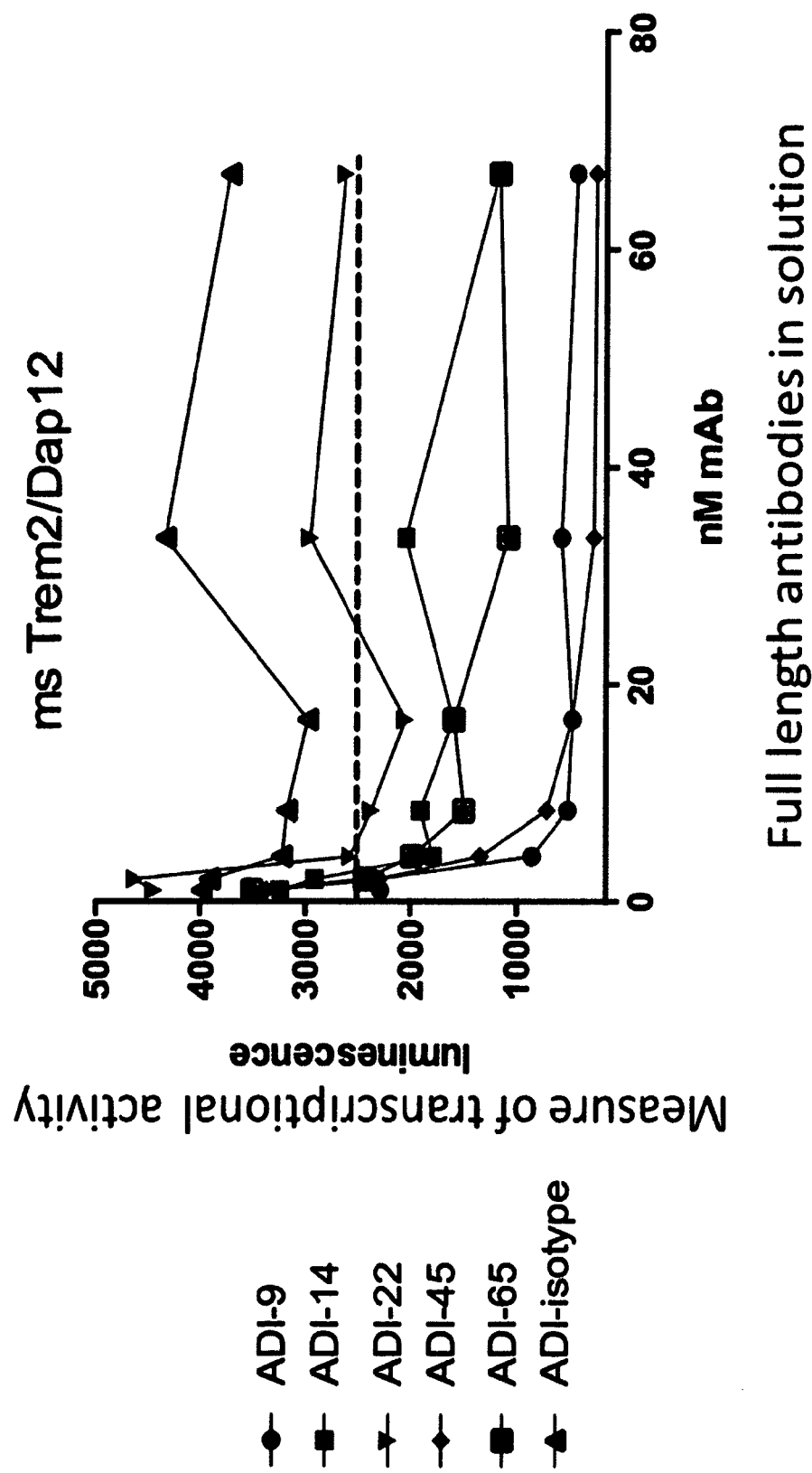


FIG. 32

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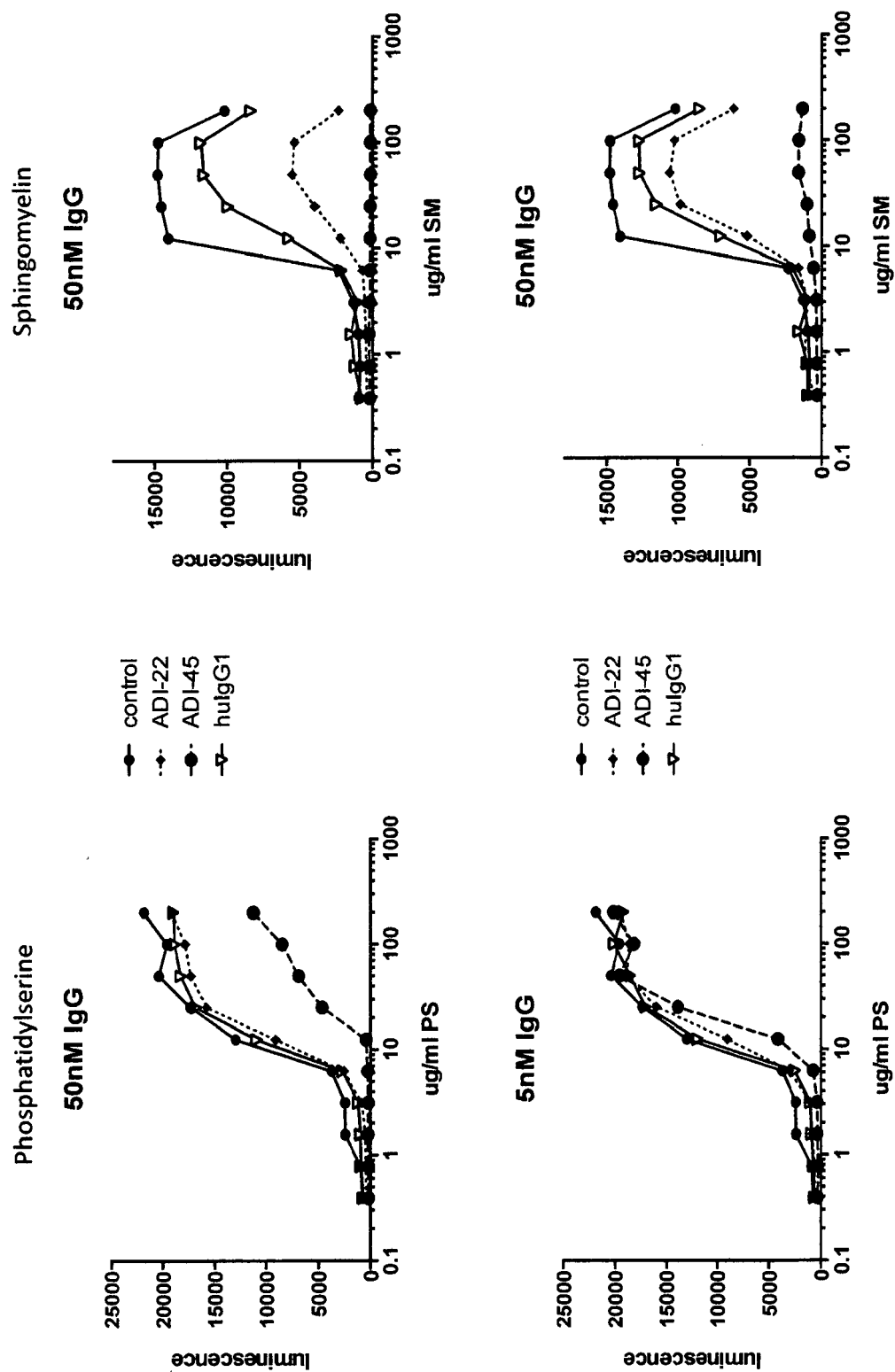


FIG. 33

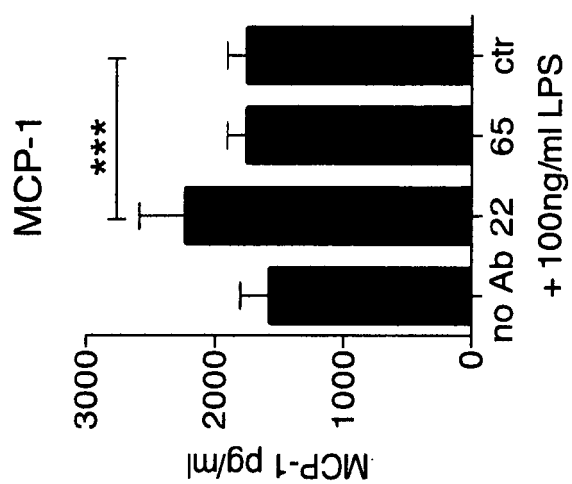


FIG. 34B

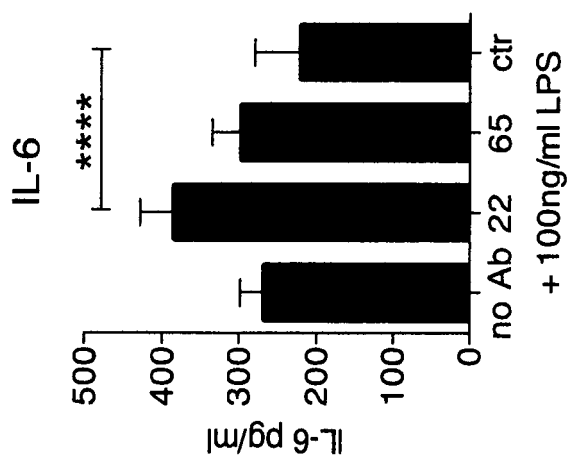


FIG. 34A