

Figure 1A - Heavy Chain Protein Sequence

Sequence	FR1	CDR1	FR2	CDR2
Name				
Ab1	QSLSESGRLVTPGTPLTITCTVSGLDLS	SYMQ	WVRQAPGKGLEWIG	VIGINDNTYYASWAKG
Ab2	EVQLVESGGGLVQPGGSLRLSCAVSGIDL	SYMQ	WVRQAPGKGLEWVG	VIGINDNTYYASWAKG
Ab3	EVQLVESGGGLVQPGGSLRLSCAVSGLDLS	SYMQ	WVRQAPGKGLEWVG	VIGINDNTYYASWAKG
Ab4	QSLSESGRLVTPGTPLTITCTVSGIDL	GYMN	WVRQAPGKGLEWIG	VIGINGATYYASWAKG
Ab5	EVQLVESGGGLVQPGGSLRLSCAVSGIDL	GYMN	WVRQAPGKGLEWVG	VIGINGATYYASWAKG
Ab6	EVQLVESGGGLVQPGGSLRLSCAVSGIDL	GYMN	WVRQAPGKGLEWVG	VIGINGATYYASWAKG
Ab7	QEQLKESGRLVTPGTSLTITCTVSGIDL	NHYMQ	WVRQAPGKGLEWIG	VVINGRITYYASWAKG
Ab8	EVQLVESGGGLVQPGGSLRLSCAVSGIDL	NHYMQ	WVRQAPGKGLEWVG	VVINGRITYYASWAKG
Ab9	QSLSESGRLVTPGTPLTITCTVSGIGLS	SYMQ	WVRQSPGRGLEWIG	VIGSDGKTYATWAKG
Ab10	EVQLVESGGGLVQPGGSLRLSCAVSGIGLS	SYMQ	WVRQAPGKGLEWVG	VIGSDGKTYATWAKG
Ab11	QSLSESGRLVTPGGSLTITCTVSGIDVT	NYMQ	WVRQAPGKGLEWIG	VIGVNGKRYIASWAKG
Ab12	EVQLVESGGGLVQPGGSLRLSCAVSGIDVT	NYMQ	WVRQAPGKGLEWVG	VIGVNGKRYIASWAKG
Ab13	QSVESGGGLVQPEGSLTITCTASGDFDS	SNAMW	WVRQAPGKGLEWIG	CIYNGDGSTYYASWVNG
Ab14	EVQLVESGGGLVQPGGSLRLSCAVSGIGLS	SYMQ	WVRQAPGKGLEWVG	VIGSDGKTYATWAKG

Figure 1B - Heavy Chain Protein Sequence

Sequence	FR3	CDR3	FR4
Name			
Ab1	RFTISRASSSTTVDLKMTSLTTEDTAVFCAR	GDI	WGPGLTVTVSS
Ab2	RFTISRDNKTTVYLQMNSLRAEDTAVFCAR	GDI	WGQGLTVTVSS
Ab3	RFTISRDNKTTVYLQMNSLRAEDTAVFCAR	GDI	WGQGLTVTVSS
Ab4	RFTISKTSSTTVDLKMTSLTTEDTAVFCAR	GDI	WGPGLTVTVSS
Ab5	RFTISRDNKTTVYLQMNSLRAEDTAVFCAR	GDI	WGQGLTVTVSS
Ab6	RFTISRDNKTTVYLQMNSLRAEDTAVFCAR	GDI	WGQGLTVTVSS
Ab7	RFTISRSTSTTVDLKMTRETTEDTAVFCAR	GDI	WGPGLTVTVSS
Ab8	RFTISRDNKTTVYLQMNSLRAEDTAVFCAR	GDI	WGQGLTVTVSS
Ab9	RFTISKTSSTTVDLRMASLTEDTAVFCTR	GDI	WGPGLTVTVSS
Ab10	RFTISRDNKTTVYLQMNSLRAEDTAVFCTR	GDI	WGQGLTVTVSS
Ab11	RFTISKTSSTTVDLKMTSLTTEDTAVFCAR	GDI	WGPGLTVTVSS
Ab12	RFTISRDNKTTVYLQMNSLRAEDTAVFCAR	GDI	WGQGLTVTVSS
Ab13	RFSISKTSSTTVTLQLNSLTVADTAVFCAR	DLDL	WGPGLTVTVSS
Ab14	RFTISRDNKTTVYLQMNSLRAEDTAVFCTR	GDI	WGQGLTVTVSS

Figure 1C - Heavy Chain Protein Sequence

Sequence	Constant Region
Ab1	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab2	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab3	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab4	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab5	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab6	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab7	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab8	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab9	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab10	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab11	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab12	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab13	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV
Ab14	ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNV

Figure 1D - Heavy Chain Protein Sequence

Sequence	Constant Region
Ab1	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab2	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab3	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab4	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab5	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab6	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab7	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab8	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab9	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab10	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab11	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab12	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab13	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA
Ab14	NHKPSNTKVDAKRVKPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPKDTLMI SRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNA

Figure 1E - Heavy Chain Protein Sequence

Sequence	Constant Region
Ab1	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab2	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab3	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab4	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab5	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab6	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab7	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab8	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab9	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab10	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab11	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab12	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab13	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF
Ab14	KTKPREEQYASTYRVVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREMTKNQVSLTCLVKGF

Figure 1F - Heavy Chain Protein Sequence

Sequence	Constant Region	(SEQ ID NO: 1)
Ab1	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 1)
Ab2	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 41)
Ab3	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 81)
Ab4	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 121)
Ab5	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 161)
Ab6	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 201)
Ab7	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 241)
Ab8	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 281)
Ab9	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 321)
Ab10	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 361)
Ab11	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 401)
Ab12	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 441)
Ab13	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 481)
Ab14	YPSDIAVEWESNGQPENNYKTTTPPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK	(SEQ ID NO: 521)

Figure 2A - Light Chain Protein Sequence

Sequence		FR1		CDR1		FR2		CDR2	
Name									
Ab1	QVLTQTASPVSAAVSGSTVTINC			QASQSVYDNNYLA		WYQQKPGQPPKQLIY		STSTLAS	
Ab2	QVLTQSPSSLASVGDRTVINC			QASQSVYDNNYLA		WYQQKPGKVPKQLIY		STSTLAS	
Ab3	QVLTQSPSSLASVGDRTVINC			QASQSVYDNNYLA		WYQQKPGKVPKQLIY		STSTLAS	
Ab4	QVLTQTSPVSAAVSGSTVTINC			QASQSVYHNTYLA		WYQQKPGQPPKQLIY		DASTLAS	
Ab5	QVLTQSPSSLASVGDRTVINC			QASQSVYHNTYLA		WYQQKPGKVPKQLIY		DASTLAS	
Ab6	QVLTQSPSSLASVGDRTVINC			QASQSVYHNTYLA		WYQQKPGKVPKQLIY		DASTLAS	
Ab7	QVLTQTASPVSAAVSGSTVTINC			QASQSVYNNYLA		WYQQKPGQPPKQLIY		STSTLAS	
Ab8	QVLTQSPSSLASVGDRTVINC			QASQSVYNNYLA		WYQQKPGKVPKQLIY		STSTLAS	
Ab9	QVLTQTSPVSAAVSGSTVTINC			QASQNVYNNNYLA		WYQQKPGQPPKQLIY		STSTLAS	
Ab10	QVLTQSPSSLASVGDRTVINC			QASQNVYNNNYLA		WYQQKPGKVPKQLIY		STSTLAS	
Ab11	QVLTQTASPVPVSGSTVTINC			RASQSVYNNNYLA		WYQQKPGQPPKQLIY		STSTLAS	
Ab12	QVLTQSPSSLASVGDRTVINC			RASQSVYNNNYLA		WYQQKPGKVPKQLIY		STSTLAS	
Ab13	AIVMTQTSPSSKVPVGDVTINC			QASESLYNNALA		WFQKPGQPPKRLIY		DASKLAS	
Ab14	QVLTQSPSSLASVGDRTVINC			QASQNVYNNNYLA		WYQQKPGKVPKQLIY		STSTLAS	

Figure 2B - Light Chain Protein Sequence

Sequence		FR3		CDR3		FR4	
Name							
Ab1	GVSSRFKSGSGTQFTLTISDLECAADAATYYC			LGSYDCSSGDCFV		FGGTEVVVKR	
Ab2	GVPSRFGSGSGTFTLTISLQPEDVATYYC			LGSYDCSSGDCFV		FGGTKVEIKR	
Ab3	GVPSRFGSGSGTFTLTISLQPEDVATYYC			LGSYDCSSGDCFV		FGGTKVEIKR	
Ab4	GVPSRFGSGSGTQFTLTISGVQCNDAAAYYC			LGSYDCINGDCFV		FGGTEVVVKR	
Ab5	GVPSRFGSGSGTFTLTISLQPEDVATYYC			LGSYDCINGDCFV		FGGTKVEIKR	
Ab6	GVPSRFGSGSGTFTLTISLQPEDVATYYC			LGSYDCINGDCFV		FGGTKVEIKR	
Ab7	GVSSRFKSGSGTQFTLTISDVQCDDAATYYC			LGSYDCSTGDCFV		FGGTEVVVKR	
Ab8	GVPSRFGSGSGTFTLTISLQPEDVATYYC			LGSYDCSTGDCFV		FGGTKVEIKR	
Ab9	GVSSRFKSGSGTQFTLTISDVQCDDAATYYC			LGSYDCSRGDCFV		FGGTEVVVKR	
Ab10	GVPSRFGSGSGTFTLTISLQPEDVATYYC			LGSYDCSRGDCFV		FGGTKVEIKR	
Ab11	GVSSRFKSGSGTQFTLTISDVQCDDAATYYC			LGSYDCSNGDCFV		FGGTEVVVKR	
Ab12	GVPSRFGSGSGTFTLTISLQPEDVATYYC			LGSYDCSNGDCFV		FGGTKVEIKR	
Ab13	GVPSRFGSGSGTQFTLTISGVQCDDAATYYC			GGYRSDSVDGVA		FAGGTEVVVKR	
Ab14	GVPSRFGSGSGTFTLTISLQPEDVATYYC			LGSYDCSRGDCFV		FGGTKVEIKR	

Figure 2C - Light Chain Protein Sequence

Sequence	Constant Region
Ab1	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab2	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab3	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab4	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab5	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab6	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab7	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab8	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab9	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab10	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab11	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab12	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab13	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA
Ab14	TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYA

Figure 2D - Light Chain Protein Sequence

Sequence	Constant Region
Ab1	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 21)
Ab2	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 61)
Ab3	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 101)
Ab4	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 141)
Ab5	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 181)
Ab6	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 221)
Ab7	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 261)
Ab8	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 301)
Ab9	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 341)
Ab10	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 381)
Ab11	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 421)
Ab12	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 461)
Ab13	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 501)
Ab14	CEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 541)

Figure 3A - Heavy Chain DNA Sequence

Sequence	
Name	FR1
Ab1	CAGTCGCTGGAGGAGTCCGGGGTCCGCTGGTCAAGCCTGGACACACCCCTGACACTCACCTGCACAGTCTCTGGACTCGACCTCAGT
Ab2	GAGGTGCAGCTTGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGTCTCTGGACTCGACCTCAGT
Ab3	GAGGTGCAGCTTGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGTCTCTGGACTCGACCTCAGT
Ab4	CAGTCGCTGGAGGAGTCCGGGGTCCGCTGGTCAAGCCTGGACACACCCCTGACACTCACCTGTTCCGTCTCTGGCATCGACCTCAGT
Ab5	GAGGTGCAGCTTGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGTCTCTGGAATCGACCTCAGT
Ab6	GAGGTGCAGCTTGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGTCTCTGGAATCGACCTCAGT
Ab7	CAGGAGCAGCTGAAGGAGTCCGGGGTCCGCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGTCTCTGGAATCGACCTCAGT
Ab8	GAGGTGCAGCTTGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGTCTCTGGAATCGACCTCAGT
Ab9	CAGTCGCTGGAGGAGTCCGGGGTCCGCTGGTCAAGCCTGGACACACCCCTGACACTCACCTGCACAGTCTCTGGAATCGGGCTCAGT
Ab10	GAGGTGCAGCTTGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGTCTCTGGAATCGGGCTCAGT
Ab11	CAGTCGCTGGAGGAGTCCGGGGTCCGCTGGTCAAGCCTGGAGGATCCCTGACACTCACCTGCACAGTCTCTGGAATCGACCTCAGT
Ab12	GAGGTGCAGCTTGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGTCTCTGGAATCGAGTCACT
Ab13	CAGTCGCTGGAGGAGTCCGGGGGAGGCTTGGTCCAGCCTGAGGATCCCTGACACTCACCTGCACAGTCTCTGGAATCGAGTCACT
Ab14	GAGGTGCAGCTTGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGTCTCTGGAATCGGGCTCAGT

Figure 3B - Heavy Chain DNA Sequence

Sequence	
Name	CDR1
Ab1	AGCTACTACATGCAA
Ab2	AGCTACTACATGCAA
Ab3	AGCTACTACATGCAA
Ab4	GGCTACTACATGAAC
Ab5	GGCTACTACATGAAC
Ab6	GGCTACTACATGAAC
Ab7	AACCACTACATGCAA
Ab8	AACCACTACATGCAA
Ab9	AGCTACTACATGCAG
Ab10	AGCTACTACATGCAA
Ab11	AACCTACTATATGCAA
Ab12	AACCTACTACATGCAA
Ab13	AGCAATGCAATGTGG
Ab14	AGCTACTACATGCAA

Sequence	
Name	FR2
Ab1	TGGGTCCGCCCAGGCTCCAGGGAAGGGGCTGGAATGGATCGGA
Ab2	TGGGTCCGTCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCCGA
Ab3	TGGGTCCGTCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCCGA
Ab4	TGGGTCCGCCCAGGCTCCAGGGAAGGGGCTGGAATGGATCGGA
Ab5	TGGGTCCGTCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCCGA
Ab6	TGGGTCCGTCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCCGA
Ab7	TGGGTCCGCCCAGGCTCCAGGGAAGGGGCTGGAGTGGATCGGA
Ab8	TGGGTCCGTCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCCGA
Ab9	TGGGTCCGCCCAGTCTCCAGGGAAGGGGCTGGAATGGATCGGA
Ab10	TGGGTCCGTCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCCGA
Ab11	TGGGTCCGCCCAGGCTCCAGGGAAGGGGCTGGAATGGATCGGA
Ab12	TGGGTCCGTCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCCGA
Ab13	TGGGTCCGCCCAGGCTCCAGGGAAGGGGCTGGAGTGGATCGGA
Ab14	TGGGTCCGTCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCCGA

Figure 3C - Heavy Chain DNA Sequence

Sequence	CDR2
Name	
Ab1	GTCAATTGGTATTAAATGATAACACATATACGCGAGCTGGCGAAAGGC
Ab2	GTCAATTGGTATCAATGATAACACATATACGCGAGCTGGCGAAAGGC
Ab3	GTCAATTGGTATCAATGATAACACATATACGCGAGCTGGCGAAAGGC
Ab4	GTCAATTGGTATTAAATGGTGCCACATATACGCGAGCTGGCGAAAGGC
Ab5	GTCAATTGGTATTAAATGGTGCCACATATACGCGAGCTGGCGAAAGGC
Ab6	GTCAATTGGTATTAAATGGTGCCACATATACGCGAGCTGGCGAAAGGC
Ab7	GTCTTGGTATTAAATGGTGCCACATATACGCGAGCTGGCGAAAGGC
Ab8	GTCTTGGTATCAATGGTGCCACATATACGCGAGCTGGCGAAAGGC
Ab9	GTCAATTGGTAGTGGTAAAGACATATACGCGAGCTGGCGAAAGGC
Ab10	GTCAATTGGTAGTGGTAAAGACATATACGCGAGCTGGCGAAAGGC
Ab11	GTCAATTGGTGTGAATGGTAAAGACATATACGCGAGCTGGCGAAAGGC
Ab12	GTCAATTGGTGTGAATGGTAAAGACATATACGCGAGCTGGCGAAAGGC
Ab13	TGCATTTACAATGGTGTGGCAGCACATATACGCGAGCTGGGTGAATGGC
Ab14	GTCAATTGGTAGTGGTAAAGACATATACGCGAGCTGGCGAAAGGC

Figure 3D - Heavy Chain DNA Sequence

Sequence	FR3
Name	
Ab1	CGATTCACCATCTCCAGAGACCTCGTCGACCACCGTGGATCTGANAATGACCAGTCTGACAACCGAGGAGACGGCCACCTATTCTGTGCCAGA
Ab2	CGATTCACCATCTCCAGAGACAAATCCAGACCACGGTGTATCTTCAATGAACAGCCTGAGAGCTGAGACACACTGCTGTGTATTCTGTGCTAGA
Ab3	CGATTCACCATCTCCAGAGACAAATCCAGACCACGGTGTATCTTCAATGAACAGCCTGAGAGCTGAGACACACTGCTGTGTATTCTGTGCTAGA
Ab4	CGATTCACCATCTCAAAAACCTCGTCGACCACGGTGGATCTGAAAATGACCAGTCTGACAACCGAGGACACGGCCACCTATTCTGTGCCAGA
Ab5	CGATTCACCATCTCCAGAGACAAATCCAGACCACGGTGTATCTTCAATGAACAGCCTGAGAGCTGAGGACACTGCTGTGTATTCTGTGCTAGA
Ab6	CGATTCACCATCTCCAGAGACAAATCCAGACCACGGTGTATCTTCAATGAACAGCCTGAGAGCTGAGGACACTGCTGTGTATTCTGTGCTAGA
Ab7	CGATTCACCATCTCCAGAACCTCGTCGACCACGGTGGATCTGANAATGACCAGGCTGACAACCGAGGACACGGCCACCTATTCTGTGCCAGA
Ab8	CGATTCACCATCTCCAGAGACAAATCCAGACCACGGTGTATCTTCAATGAACAGCCTGAGAGCTGAGGACACTGCTGTGTATTCTGTGCTAGA
Ab9	CGATTCACCATCTCAAGACCTCGTCGACCACGGTGGATCTGAGAATGGCCAGTCTGACAACCGAGGACACGGCCACCTATTCTGTACCAGA
Ab10	CGATTCACCATCTCCAGAGACAAATCCAGACCACGGTGTATCTTCAATGAACAGCCTGAGAGCTGAGGACACTGCTGTGTATTCTGTACCAGA
Ab11	CGATTCACCATCTCAAAAACCTCGTCGACCACGGTGGATCTGAAAATGACCAGTCTGACAACCGAGGACACGGCCACCTATTCTGTGCCAGA
Ab12	CGATTCACCATCTCCAGAGACAAATCCAGACCACGGTGTATCTTCAATGAACAGCCTGAGAGCTGAGGACACTGCTGTGTATTCTGTGCTAGA
Ab13	CGATTCTCCATCTCAAAAACCTCGTCGACCACGGTGACTCTGCAACTGAATAGTCTGACAGTCTGCGGACACGGCCACCTATTATTGTGCCAGA
Ab14	CGATTCACCATCTCCAGAGACAAATCCAGACCACGGTGTATCTTCAATGAACAGCCTGAGAGCTGAGGACACTGCTGTGTATTCTGTACCAGA

Figure 3E - Heavy Chain DNA Sequence

Sequence				Constant Region			
Name	CDR3	FR4					
Ab1	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab2	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab3	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab4	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab5	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab6	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab7	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab8	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab9	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab10	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab11	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab12	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab13	GATCTTGACTTG	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			
Ab14	GGGACATC	TGGGGCCCAAGGACACCTCGTCACCGTCTCGAGC		GCCTCCACCAAGGGCCCATCGGTCTTCCCTGGCACCCCTCCTCC			

Figure 3F - Heavy Chain DNA Sequence

Sequence				Constant Region			
Name	Constant Region						
Ab1	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab2	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab3	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab4	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab5	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab6	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab7	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab8	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab9	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab10	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab11	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab12	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab13	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						
Ab14	AAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGGCGCC						

Figure 3G - Heavy Chain DNA Sequence

Sequence	Constant Region
Ab1	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab2	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab3	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab4	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab5	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab6	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab7	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab8	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab9	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab10	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab11	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab12	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab13	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC
Ab14	CTGACCAAGCGGCGTGACACACCTTCCCGGCTGTCTACAGTCTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGC

Figure 3H - Heavy Chain DNA Sequence

Sequence	Constant Region
Ab1	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab2	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab3	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab4	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab5	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab6	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab7	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab8	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab9	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab10	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab11	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab12	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab13	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA
Ab14	TTGGGCACCCAGACCTACATCTGCAACGCTGAATCACAAGCCAGCAACACCAAGTTGGACAAGAGAGTTGAGCCCCAAATCTTGTGACAAA

Figure 3I - Heavy Chain DNA Sequence

Sequence	Constant Region
Ab1	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab2	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab3	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab4	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab5	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab6	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab7	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab8	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab9	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab10	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab11	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab12	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab13	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG
Ab14	ACTCACACATGCCACACCGTGCCACAGACCTGAACCTCCTGGGGGACCGTCAGTCTTCCCTCTTCCCCCCCCAAAACCCCAAGGACACCCCTCATG

Figure 3J - Heavy Chain DNA Sequence

Sequence	Constant Region
Ab1	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab2	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab3	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab4	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab5	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab6	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab7	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab8	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab9	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab10	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab11	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab12	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab13	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG
Ab14	ATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTG

Figure 3K - Heavy Chain DNA Sequence

Sequence	Constant Region
Ab1	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab2	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab3	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab4	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab5	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab6	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab7	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab8	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab9	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab10	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab11	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab12	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab13	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC
Ab14	GAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACGCCAGCAGTACCGTGTGGTCAGCGTCTCACCGTCTCTGCACCCAGGAC

Figure 3L - Heavy Chain DNA Sequence

Sequence	Constant Region
Ab1	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab2	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab3	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab4	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab5	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab6	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab7	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab8	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab9	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab10	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab11	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab12	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab13	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG
Ab14	TGGCTGAATGGCAAGGAGTACAAGTGC AAGGTCTCCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAG

Figure 3M - Heavy Chain DNA Sequence

Sequence	Constant Region
Ab1	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab2	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab3	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab4	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab5	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab6	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab7	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab8	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab9	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab10	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab11	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab12	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab13	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC
Ab14	CCCCGAGAACCCACAGGTGTACACCTGCCCCCATCCCGGGAGGAGATGACCAAGAACCCAGGTGACCTGACCTGCCTGGTCAAGGGCTTC

Figure 3N - Heavy Chain DNA Sequence

Sequence	Constant Region
Ab1	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab2	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab3	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab4	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab5	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab6	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab7	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab8	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab9	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab10	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab11	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab12	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab13	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC
Ab14	TATCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCGAGCCGGAGAACAACTACAAGACCAACGCCCTCCCGTGGTGGACTCCGACGGC

Figure 30 - Heavy Chain DNA Sequence

Sequence	Constant Region
Ab1	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab2	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab3	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab4	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab5	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab6	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab7	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab8	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab9	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab10	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab11	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab12	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab13	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG
Ab14	TCCTTCTTCCCTCTACAGCAAGCTCACCGTGGACAAAGACAGCAGTGGCAGCAGGGGAACGCTCTTCTCATGCTCCGTCCGTGATGCATGAGGCTCTG

Figure 3P - Heavy Chain DNA Sequence

Sequence	Constant Region	(SEQ ID NO: 11)
Ab1	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 11)
Ab2	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 51)
Ab3	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 91)
Ab4	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 131)
Ab5	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 171)
Ab6	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 211)
Ab7	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 251)
Ab8	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 291)
Ab9	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 331)
Ab10	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 371)
Ab11	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 411)
Ab12	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 451)
Ab13	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 491)
Ab14	CACAACCACTACACGCAGAGAGCCCTCTCCCTGTCTCCGGTAAATGA	(SEQ ID NO: 531)

Figure 4A - Light Chain DNA Sequence

Sequence	FR1
Name	
Ab1	CAAGTGTGACCCAGACTGCATCCCCCGTGTCTGCAGCTGTGGGAGCACAGTCAACATCAATTGC
Ab2	CAAGTGTGACCCAGACTTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCAACATCAATTGC
Ab3	CAAGTGTGACCCAGACTTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCAACATCAATTGC
Ab4	CAAGTGTGACCCAGACTTCCATCCTCCCGTGTCTGCAGCTGTGGGAGGACAGTCAACATCAATTGC
Ab5	CAAGTGTGACCCAGACTTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCAACATCAATTGC
Ab6	CAAGTGTGACCCAGACTTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCAACATCAATTGC
Ab7	CAAGTGTGACCCAGACTTCCATCCTCCCGTGTCTGCAGCTGTGGGAGGACAGAGTCAACATCAATTGC
Ab8	CAAGTGTGACCCAGACTTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCAACATCAATTGC
Ab9	CAAGTGTGACCCAGACTTCCATCCTCCCGTGTCTGCAGCTGTGGGAGGACAGTCAACATCAATTGC
Ab10	CAAGTGTGACCCAGACTTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCAACATCAATTGC
Ab11	CAGGTGTGACCCAGACTGCATCCTCCCTGTCTCCAGCTGTGGGAGGACAGTCAACATCAATTGC
Ab12	CAAGTGTGACCCAGACTTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCAACATCAATTGC
Ab13	GCCATCGTGATGACCCAGACTTCCATCTCCCAAGTGTCCCTGTGGGAGACACAGTCAACATCAATTGC
Ab14	CAAGTGTGACCCAGACTTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCAACATCAATTGC

Figure 4B - Light Chain DNA Sequence

Sequence	CDR1	FR2
Name		
Ab1	CAGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGCAGCCTCCCAAGCAACTGATCTAT
Ab2	CAGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAAAGTTCTTAAGCAACTGATCTAT
Ab3	CAGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAAAGTTCTTAAGCAACTGATCTAT
Ab4	CAGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAGCCTCCCAAGCAACTGATCTAT
Ab5	CAGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAAAGTTCTTAAGCAACTGATCTAT
Ab6	CAGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAAAGTTCTTAAGCAACTGATCTAT
Ab7	CAGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAGCCTCCCAAGCAACTGATCTAT
Ab8	CAGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAAAGTTCTTAAGCAACTGATCTAT
Ab9	CAGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAGCCTCCCAAGCAACTGATCTAT
Ab10	CAGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAAAGTTCTTAAGCAACTGATCTAT
Ab11	CGGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAGCCTCCCAAGCAACTGATCTAT
Ab12	CGGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAAAGTTCTTAAGCAACTGATCTAT
Ab13	CAGGCCAGTCAGAGTGTGTTATGATAACAACTAGCCTTGGCC	TGGTTTCAGCAGAAACCAGGGGAGCCTCCCAAGGCGCTGATCTAT
Ab14	CAGGCCAGTCAGAGTGTGTTATGATAACAACTACCTAGCC	TGGTATCAGCAGAAACCAGGGGAAAGTTCTTAAGCAACTGATCTAT

Figure 4C - Light Chain DNA Sequence

Sequence		FR3	
Name	CDR2		
Ab1	TCTACATCCACTCTGGCATCT	GGGGTCTCATCGCGGTTCAAAGGCAGTGGATCTGGGACACAGTTCACTCTCACCA	
Ab2	TCTACATCCACTCTGGCATCT	GGGGTCCCATCTCGTTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCA	
Ab3	TCTACATCCACTCTGGCATCT	GGGGTCCCATCTCGTTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCA	
Ab4	GATGCATCCACTCTGGCGTCT	GGGGTCCCATCGCGGTTTCAGCGGCAGTGGATCTGGGACACAGTTCACTCTCACCA	
Ab5	GATGCATCCACTCTGGCATCT	GGGGTCCCATCTCGTTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCA	
Ab6	GATGCATCCACTCTGGCATCT	GGGGTCCCATCTCGTTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCA	
Ab7	TCTACATCCACTCTGGCATCT	GGGGTCTCATCGCGGATTCAAAGGCAGTGGATCTGGGACAGATTTCACTCTCACCA	
Ab8	TCTACATCCACTCTGGCATCT	GGGGTCCCATCTCGTTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCA	
Ab9	TCTACATCCACTCTGGCATCT	GGGGTCTCATCGCGGATTCAGAGGCAGTGGATCTGGGACACAGTTCACTCTCACCA	
Ab10	TCTACATCCACTCTGGCATCT	GGGGTCCCATCTCGTTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCA	
Ab11	TCTACATCCACTCTGGCATCT	GGGGTCTCATCGCGGATTCAAAGGCAGTGGATCTGGGACACAGTTCACTCTCACCA	
Ab12	TCTACATCCACTCTGGCATCT	GGGGTCCCATCTCGTTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCA	
Ab13	GATGCATCCAACTGGCATCT	GGGGTCCCATCGCGGTTTCAGTGGCAGTGGATCTGGGACACAGTTCACTCTCACCA	
Ab14	TCTACATCCACTCTGGCATCT	GGGGTCCCATCTCGTTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCA	

Figure 4D - Light Chain DNA Sequence

Sequence		CDR3	
Name	FR3		
Ab1	TCAGCGACCTGGAGTGTGCCGATGCTGCCACTTACTACTGT	CTAGGCAGTTATGATTTAGTAGTGGTGAATGTTTTGTT	
Ab2	TCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGT	CTAGGCAGTTATGATTTAGTAGTGGTGAATGTTTTGTT	
Ab3	TCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGT	CTAGGCAGTTATGATTTAGTAGTGGTGAATGTTTTGTT	
Ab4	TCAGCGGCGTGCAGTGTAAACGATGCTGCCGCTTACTACTGT	CTGGGCAGTTATGATTTACTAAATGGTGAATGTTTTGTT	
Ab5	TCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGT	CTGGGCAGTTATGATTTACTAAATGGTGAATGTTTTGTT	
Ab6	TCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGT	CTGGGCAGTTATGATTTACTAAATGGTGAATGTTTTGTT	
Ab7	TCAGCGAGTGCAGTGTGACGATGCTGCCACTTACTACTGT	CTAGGCAGTTATGATTTAGTAGTGGTGAATGTTTTGTT	
Ab8	TCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGT	CTGGGCAGTTATGATTTAGTAGTGGTGAATGTTTTGTT	
Ab9	TCAGCGAGTGCAGTGTGACGATGCTGCCACTTACTACTGT	CTAGGCAGTTATGATTTAGTAGTGGTGAATGTTTTGTT	
Ab10	TCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGT	CTGGGCAGTTATGATTTAGTAGTGGTGAATGTTTTGTT	
Ab11	TCAGCGAGTGCAGTGTGACGATGCTGCCACTTACTACTGT	CTAGGCAGTTATGATTTAGTAGTGGTGAATGTTTTGTT	
Ab12	TCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGT	CTGGGCAGTTATGATTTAGTAGTGGTGAATGTTTTGTT	
Ab13	TCAGTGGCGTGCAGTGTGACGATGCTGCCACTTACTACTGT	GGAGGCTACAGAAATGATGTTGATGGTGGTGGCT	
Ab14	TCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGT	CTGGGCAGTTATGATTTAGTAGTGGTGAATGTTTTGTT	

Figure 4E - Light Chain DNA Sequence

Sequence		Constant Region	
Name	FR4		
Ab1	TTCGGCGAGGAGCCGAGGTGGTGGTCAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab2	TTCGGCGAGGAGCAACCAAGGTGAAATCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab3	TTCGGCGAGGAGCAACCAAGGTGAAATCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab4	TTCGGCGAGGAGGACCGAGGTGGTGGTCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab5	TTCGGCGAGGAGCAACCAAGGTGAAATCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab6	TTCGGCGAGGAGCAACCAAGGTGAAATCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab7	TTCGGCGAGGAGGACCGAGGTGGTGGTCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab8	TTCGGCGAGGAGCAACCAAGGTGAAATCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab9	TTCGGCGAGGAGGACCGAGGTGGTGGTCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab10	TTCGGCGAGGAGCAACCAAGGTGAAATCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab11	TTCGGCGAGGAGGACCGAGGTGGTGGTCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab12	TTCGGCGAGGAGCAACCAAGGTGAAATCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab13	TTCGGCGAGGAGGACCGAGGTGGTGGTCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	
Ab14	TTCGGCGAGGAGCAACCAAGGTGAAATCAAAACGT	ACGGTGGGTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTG	

Figure 4F - Light Chain DNA Sequence

Sequence		Constant Region	
Name			
Ab1	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab2	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab3	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab4	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab5	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab6	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab7	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab8	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab9	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab10	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab11	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab12	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab13	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		
Ab14	AAATCTGGAACCTGCCTCTGTTGTGCGCTGCTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGAAAGTGGATAACGCCCC		

Figure 4G - Light Chain DNA Sequence

Sequence	Constant Region
Ab1	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab2	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab3	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab4	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab5	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab6	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab7	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab8	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab9	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab10	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab11	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab12	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab13	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG
Ab14	TCCAATCGGGTAAC TCC CAGGAGAGTGTACAGAGCAGGACAGCAAGGACAGCACTACAGCCTCAGCAGCACCCCTGACGCTGAG

Figure 4H - Light Chain DNA Sequence

Sequence	Constant Region
Ab1	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab2	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab3	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab4	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab5	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab6	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab7	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab8	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab9	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab10	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab11	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab12	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab13	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC
Ab14	CAAAGCAGACTACGAGAAACACAAAGTCTACGCCCTGCGAAGTCAACCCATCAGGGCCTGAGCTCGCCCCGTCAAAAAGAGCTTCAAC

Figure 4I - Light Chain DNA Sequence

Sequence Name	
Ab1	AGGGGAGAGTGTAG (SEQ ID NO: 31)
Ab2	AGGGGAGAGTGTAG (SEQ ID NO: 71)
Ab3	AGGGGAGAGTGTAG (SEQ ID NO: 111)
Ab4	AGGGGAGAGTGTAG (SEQ ID NO: 151)
Ab5	AGGGGAGAGTGTAG (SEQ ID NO: 191)
Ab6	AGGGGAGAGTGTAG (SEQ ID NO: 231)
Ab7	AGGGGAGAGTGTAG (SEQ ID NO: 271)
Ab8	AGGGGAGAGTGTAG (SEQ ID NO: 311)
Ab9	AGGGGAGAGTGTAG (SEQ ID NO: 351)
Ab10	AGGGGAGAGTGTAG (SEQ ID NO: 391)
Ab11	AGGGGAGAGTGTAG (SEQ ID NO: 431)
Ab12	AGGGGAGAGTGTAG (SEQ ID NO: 471)
Ab13	AGGGGAGAGTGTAG (SEQ ID NO: 511)
Ab14	AGGGGAGAGTGTAG (SEQ ID NO: 551)

Figure 5
Heavy Chain Protein Sequence Features

Antibody	Variable Region Coordinates	SEQ ID NO:	CDR1 Coordinates	SEQ ID NO:	CDR2 Coordinates	SEQ ID NO:	CDR3 Coordinates	SEQ ID NO:
Ab1	1-109	2	30-34	4	49-64	6	96-98	8
Ab2	1-111	42	31-35	44	50-65	46	98-100	48
Ab3	1-111	82	31-35	84	50-65	86	98-100	88
Ab4	1-109	122	30-34	124	49-64	126	96-98	128
Ab5	1-111	162	31-35	164	50-65	166	98-100	168
Ab6	1-111	202	31-35	204	50-65	206	98-100	208
Ab7	1-110	242	31-35	244	50-65	246	97-99	248
Ab8	1-111	282	31-35	284	50-65	286	98-100	288
Ab9	1-109	322	30-34	324	49-64	326	96-98	328
Ab10	1-111	362	31-35	364	50-65	366	98-100	368
Ab11	1-109	402	30-34	404	49-64	406	96-98	408
Ab12	1-111	442	31-35	444	50-65	446	98-100	448
Ab13	1-111	482	30-34	484	49-65	486	97-100	488
Ab14	1-111	522	31-35	524	50-65	526	98-100	528

Figure 6
Heavy Chain Protein Sequence Features

Antibody	FR1 Coordinates	SEQ ID NO:	FR2 Coordinates	SEQ ID NO:	FR3 Coordinates	SEQ ID NO:	FR4 Coordinates	SEQ ID NO:	Constant Region Coordinates	SEQ ID NO:
Ab1	1-29	3	35-48	5	65-95	7	99-109	9	110-439	10
Ab2	1-30	43	36-49	45	66-97	47	101-111	49	112-441	50
Ab3	1-30	83	36-49	85	66-97	87	101-111	89	112-441	90
Ab4	1-29	123	35-48	125	65-95	127	99-109	129	110-439	130
Ab5	1-30	163	36-49	165	66-97	167	101-111	169	112-441	170
Ab6	1-30	203	36-49	205	66-97	207	101-111	209	112-441	210
Ab7	1-30	243	36-49	245	66-96	247	100-110	249	111-440	250
Ab8	1-30	283	36-49	285	66-97	287	101-111	289	112-441	290
Ab9	1-29	323	35-48	325	65-95	327	99-109	329	110-439	330
Ab10	1-30	363	36-49	365	66-97	367	101-111	369	112-441	370
Ab11	1-29	403	35-48	405	65-95	407	99-109	409	110-439	410
Ab12	1-30	443	36-49	445	66-97	447	101-111	449	112-441	450
Ab13	1-29	483	35-48	485	66-96	487	101-111	489	112-441	490
Ab14	1-30	523	36-49	525	66-97	527	101-111	529	112-441	530

Figure 7
Light Chain Protein Sequence Features

Antibody	Variable Region Coordinates	SEQ ID NO:	CDR1 Coordinates	SEQ ID NO:	CDR2 Coordinates	SEQ ID NO:	CDR3 Coordinates	SEQ ID NO:
Ab1	1-113	22	23-35	24	51-57	26	90-102	28
Ab2	1-113	62	23-35	64	51-57	66	90-102	68
Ab3	1-113	102	23-35	104	51-57	106	90-102	108
Ab4	1-113	142	23-35	144	51-57	146	90-102	148
Ab5	1-113	182	23-35	184	51-57	186	90-102	188
Ab6	1-113	222	23-35	224	51-57	226	90-102	228
Ab7	1-113	262	23-35	264	51-57	266	90-102	268
Ab8	1-113	302	23-35	304	51-57	306	90-102	308
Ab9	1-113	342	23-35	344	51-57	346	90-102	348
Ab10	1-113	382	23-35	384	51-57	386	90-102	388
Ab11	1-113	422	23-35	424	51-57	426	90-102	428
Ab12	1-113	462	23-35	464	51-57	466	90-102	468
Ab13	1-113	502	24-36	504	52-58	506	91-102	508
Ab14	1-113	542	23-35	544	51-57	546	90-102	548

Figure 8
Light Chain Protein Sequence Features

Antibody	FR1 Coordinates	SEQ ID NO:	FR2 Coordinates	SEQ ID NO:	FR3 Coordinates	SEQ ID NO:	FR4 Coordinates	SEQ ID NO:	Constant Region Coordinates	SEQ ID NO:
Ab1	1-22	23	36-50	25	58-89	27	103-113	29	114-219	30
Ab2	1-22	63	36-50	65	58-89	67	103-113	69	114-219	70
Ab3	1-22	103	36-50	105	58-89	107	103-113	109	114-219	110
Ab4	1-22	143	36-50	145	58-89	147	103-113	149	114-219	150
Ab5	1-22	183	36-50	185	58-89	187	103-113	189	114-219	190
Ab6	1-22	223	36-50	225	58-89	227	103-113	229	114-219	230
Ab7	1-22	263	36-50	265	58-89	267	103-113	269	114-219	270
Ab8	1-22	303	36-50	305	58-89	307	103-113	309	114-219	310
Ab9	1-22	343	36-50	345	58-89	347	103-113	349	114-219	350
Ab10	1-22	383	36-50	385	58-89	387	103-113	389	114-219	390
Ab11	1-22	423	36-50	425	58-89	427	103-113	429	114-219	430
Ab12	1-22	463	36-50	465	58-89	467	103-113	469	114-219	470
Ab13	1-23	503	37-51	505	59-90	507	103-113	509	114-219	510
Ab14	1-22	543	36-50	545	58-89	547	103-113	549	114-219	550

Figure 9

Heavy Chain DNA Sequence Features

Antibody	Variable Region Coordinates	SEQ ID NO:	CDR1 Coordinates	SEQ ID NO:	CDR2 Coordinates	SEQ ID NO:	CDR3 Coordinates	SEQ ID NO:
Ab1	1-327	12	88-102	14	145-192	16	286-294	18
Ab2	1-333	52	91-105	54	148-195	56	292-300	58
Ab3	1-333	92	91-105	94	148-195	96	292-300	98
Ab4	1-327	132	88-102	134	145-192	136	286-294	138
Ab5	1-333	172	91-105	174	148-195	176	292-300	178
Ab6	1-333	212	91-105	214	148-195	216	292-300	218
Ab7	1-330	252	91-105	254	148-195	256	289-297	258
Ab8	1-333	292	91-105	294	148-195	296	292-300	298
Ab9	1-327	332	88-102	334	145-192	336	286-294	338
Ab10	1-333	372	91-105	374	148-195	376	292-300	378
Ab11	1-327	412	88-102	414	145-192	416	286-294	418
Ab12	1-333	452	91-105	454	148-195	456	292-300	458
Ab13	1-333	492	88-102	494	145-195	496	289-300	498
Ab14	1-333	532	91-105	534	148-195	536	292-300	538

Figure 10
Heavy Chain DNA Sequence Features

	FR1 Coordinates	SEQ ID NO:	FR2 Coordinates	SEQ ID NO:	FR3 Coordinates	SEQ ID NO:	FR4 Coordinates	SEQ ID NO:	Constant Region Coordinates	SEQ ID NO:
Antibody										
Ab1	1-87	13	103-144	15	193-285	17	295-327	19	328-1320	20
Ab2	1-90	53	106-147	55	196-291	57	301-333	59	334-1326	60
Ab3	1-90	93	106-147	95	196-291	97	301-333	99	334-1326	100
Ab4	1-87	133	103-144	135	193-285	137	295-327	139	328-1320	140
Ab5	1-90	173	106-147	175	196-291	177	301-333	179	334-1326	180
Ab6	1-90	213	106-147	215	196-291	217	301-333	219	334-1326	220
Ab7	1-90	253	106-147	255	196-288	257	298-330	259	331-1323	260
Ab8	1-90	293	106-147	295	196-291	297	301-333	299	334-1326	300
Ab9	1-87	333	103-144	335	193-285	337	295-327	339	328-1320	340
Ab10	1-90	373	106-147	375	196-291	377	301-333	379	334-1326	380
Ab11	1-87	413	103-144	415	193-285	417	295-327	419	328-1320	420
Ab12	1-90	453	106-147	455	196-291	457	301-333	459	334-1326	460
Ab13	1-87	493	103-144	495	196-288	497	301-333	499	334-1326	500
Ab14	1-90	533	106-147	535	196-291	537	301-333	539	334-1326	540

Figure 11
Light Chain DNA Sequence Features

Antibody	Variable Region Coordinates	SEQ ID NO:	CDR1 Coordinates	SEQ ID NO:	CDR2 Coordinates	SEQ ID NO:	CDR3 Coordinates	SEQ ID NO:
Ab1	1-339	32	67-105	34	151-171	36	268-306	38
Ab2	1-339	72	67-105	74	151-171	76	268-306	78
Ab3	1-339	112	67-105	114	151-171	116	268-306	118
Ab4	1-339	152	67-105	154	151-171	156	268-306	158
Ab5	1-339	192	67-105	194	151-171	196	268-306	198
Ab6	1-339	232	67-105	234	151-171	236	268-306	238
Ab7	1-339	272	67-105	274	151-171	276	268-306	278
Ab8	1-339	312	67-105	314	151-171	316	268-306	318
Ab9	1-339	352	67-105	354	151-171	356	268-306	358
Ab10	1-339	392	67-105	394	151-171	396	268-306	398
Ab11	1-339	432	67-105	434	151-171	436	268-306	438
Ab12	1-339	472	67-105	474	151-171	476	268-306	478
Ab13	1-339	512	70-108	514	154-174	516	271-306	518
Ab14	1-339	552	67-105	554	151-171	556	268-306	558

Figure 12
Light Chain DNA Sequence Features

Antibody	FR1 Coordinates	SEQ ID NO:	FR2 Coordinates	SEQ ID NO:	FR3 Coordinates	SEQ ID NO:	FR4 Coordinates	SEQ ID NO:	Constant Region Coordinates	SEQ ID NO:
Ab1	1-66	33	106-150	35	172-267	37	307-339	39	340-660	40
Ab2	1-66	73	106-150	75	172-267	77	307-339	79	340-660	80
Ab3	1-66	113	106-150	115	172-267	117	307-339	119	340-660	120
Ab4	1-66	153	106-150	155	172-267	157	307-339	159	340-660	160
Ab5	1-66	193	106-150	195	172-267	197	307-339	199	340-660	200
Ab6	1-66	233	106-150	235	172-267	237	307-339	239	340-660	240
Ab7	1-66	273	106-150	275	172-267	277	307-339	279	340-660	280
Ab8	1-66	313	106-150	315	172-267	317	307-339	319	340-660	320
Ab9	1-66	353	106-150	355	172-267	357	307-339	359	340-660	360
Ab10	1-66	393	106-150	395	172-267	397	307-339	399	340-660	400
Ab11	1-66	433	106-150	435	172-267	437	307-339	439	340-660	440
Ab12	1-66	473	106-150	475	172-267	477	307-339	479	340-660	480
Ab13	1-69	513	109-153	515	175-270	517	307-339	519	340-660	520
Ab14	1-66	553	106-150	555	172-267	557	307-339	559	340-660	560

FIG. 13

Responders at all three time-points

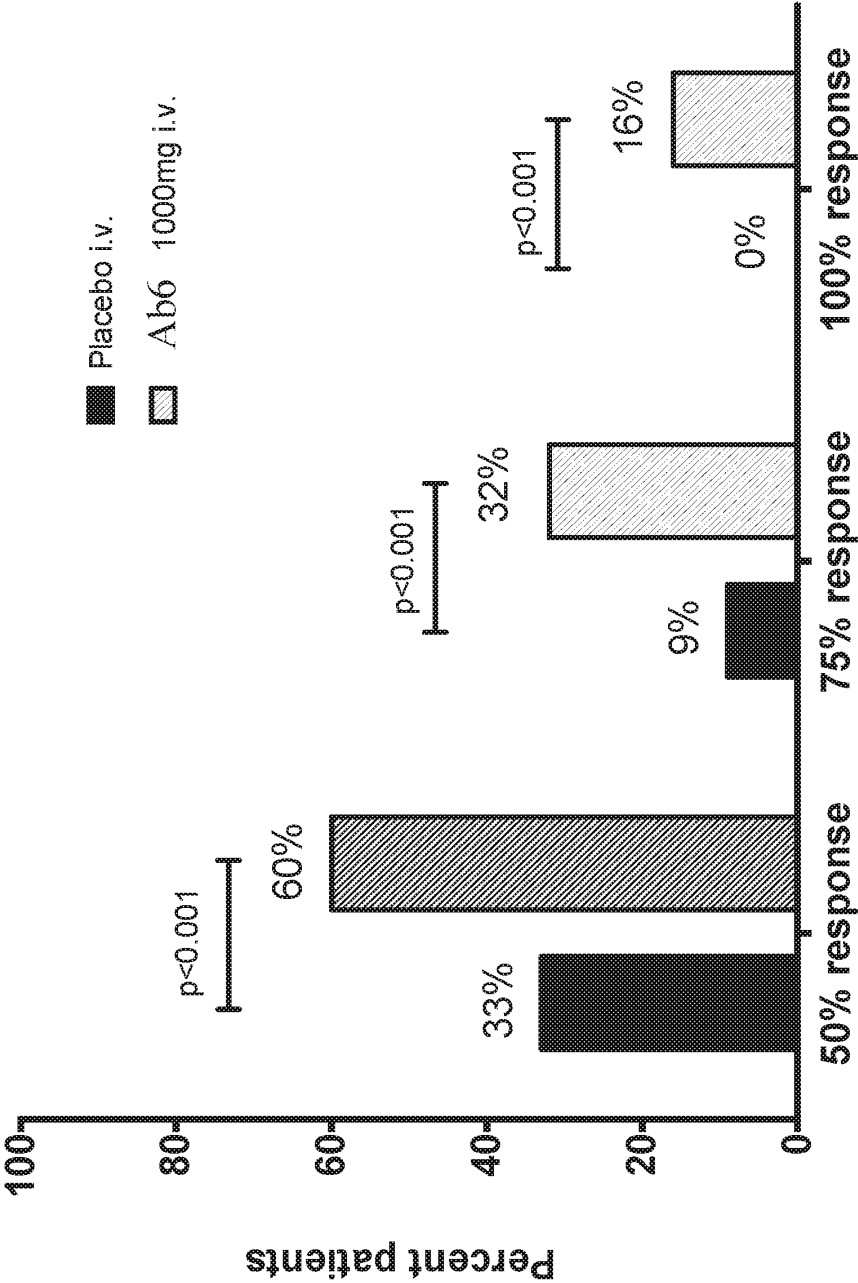


FIG. 14

Median % change from baseline: migraine days per month

Median ($\pm$ IQR) percentage change from baseline in migraine days per month: AB6 versus Placebo

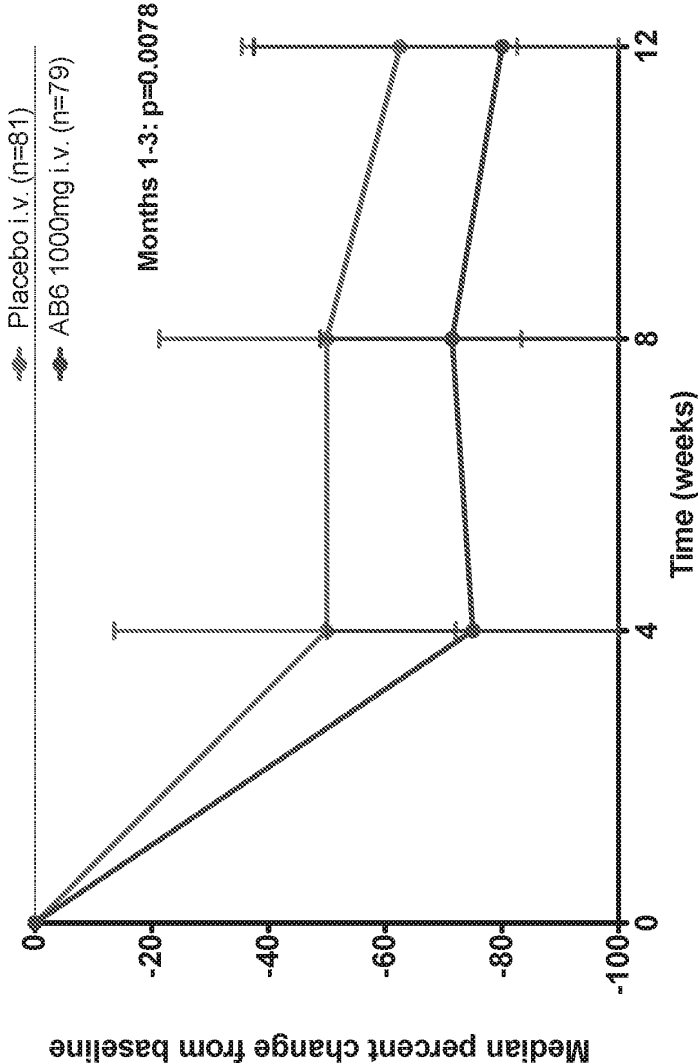


FIG. 15

Median % change from baseline: migraine episodes per month

Median ($\pm$ IQR) percentage change from baseline in migraine episodes per month: AB6 versus Placebo

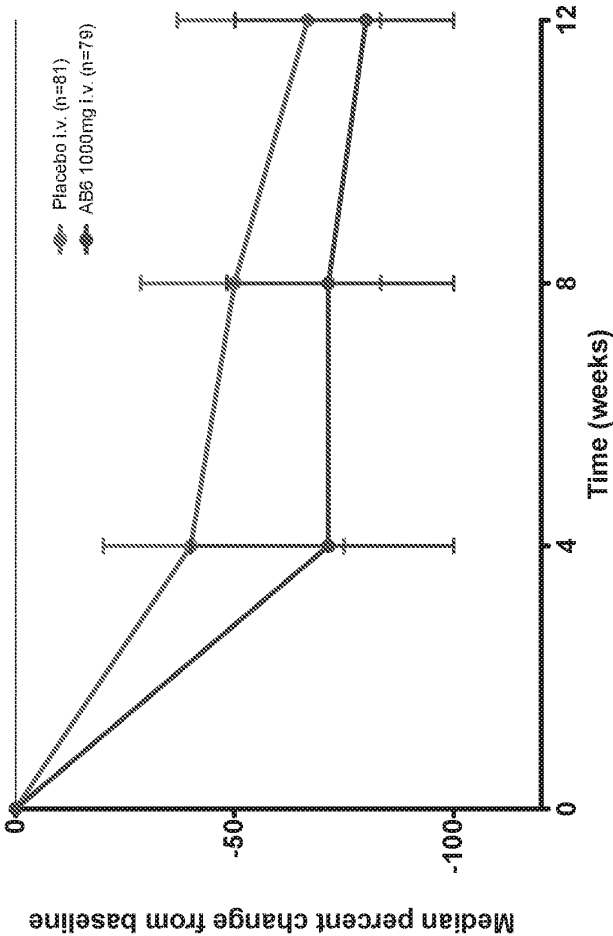


FIG. 16

Median % change from baseline: migraine hours per month

Median ($\pm$ IQR) percentage change from baseline in migraine hours per month: AB6 versus Placebo

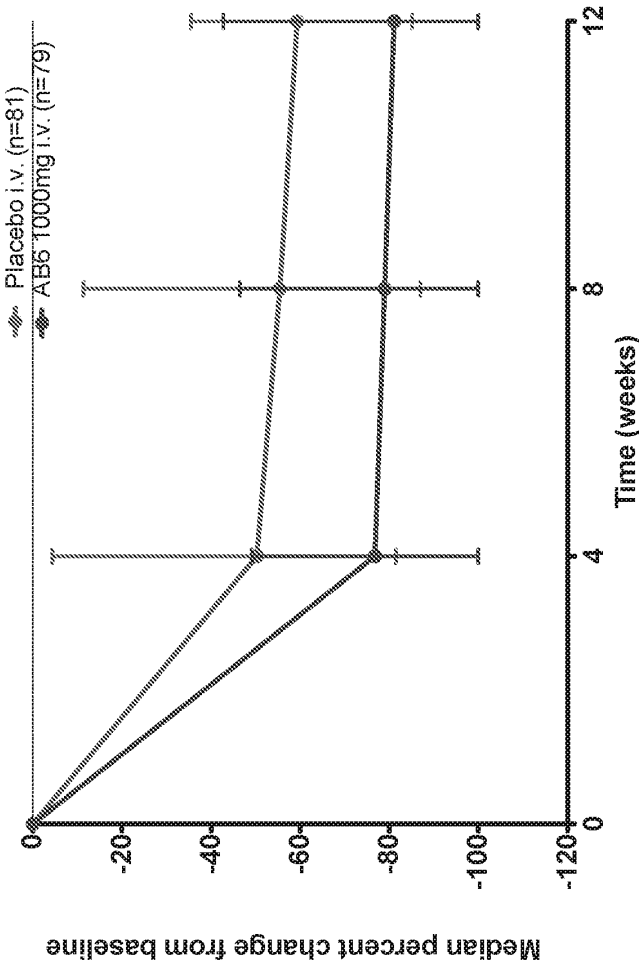


FIG. 17

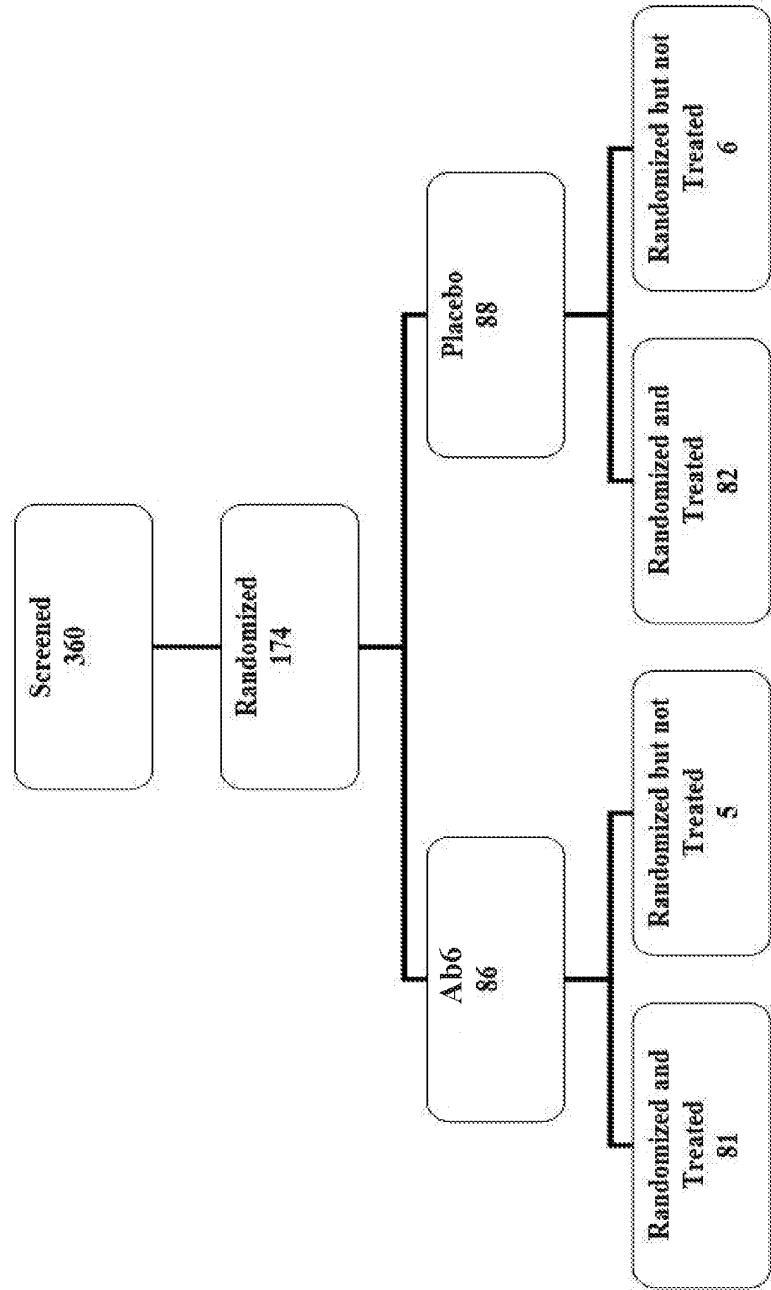


FIG. 18

Mean Change Baseline HIT-6 score

Mean ($\pm$ SD) absolute change from baseline in Headache Impact Test (HIT-6) Score: AB6 vs Placebo

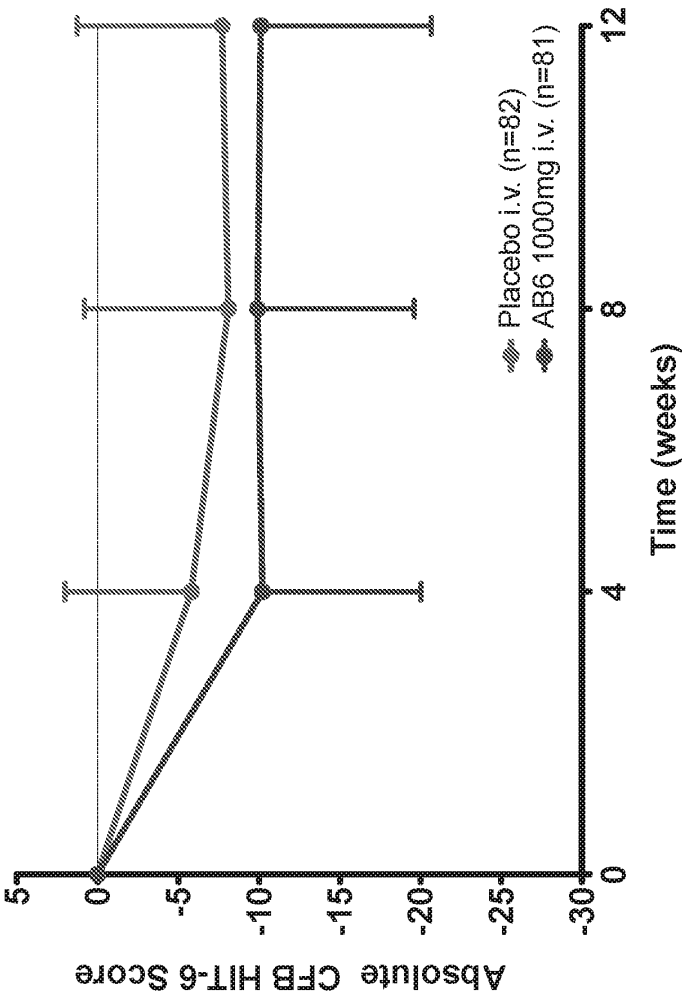


FIG. 19

HIT-6 Responder Analysis

Percent patients who are some or little/none life impact for headache impact score (HIT-6) versus time: AB6 vs Placebo

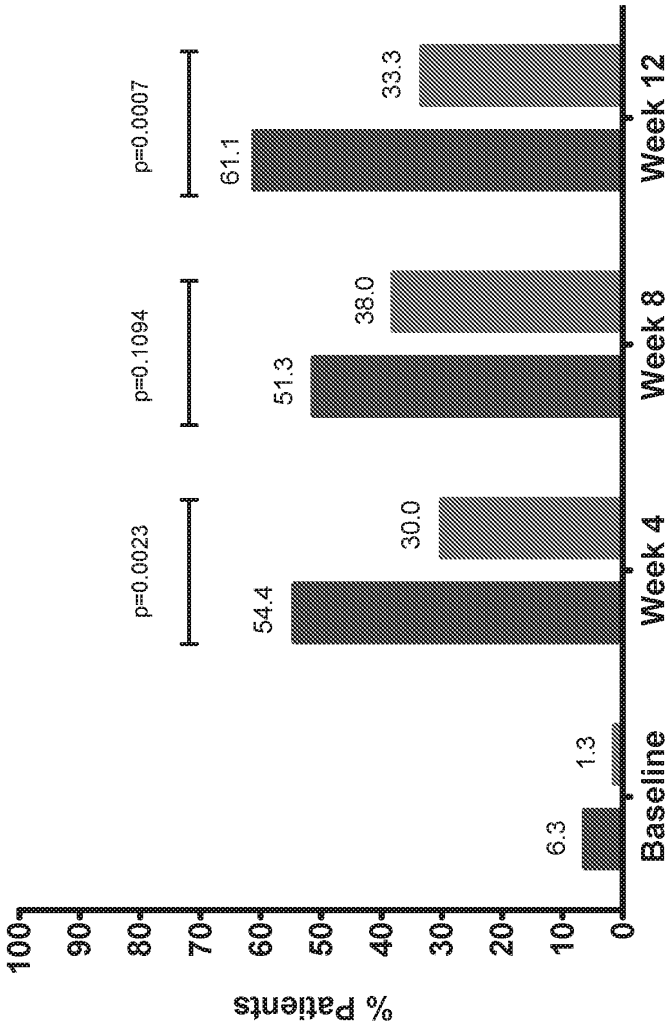


FIG. 20. PK Profile

Ab6 1000 mg I.V.
Mean +/- SD

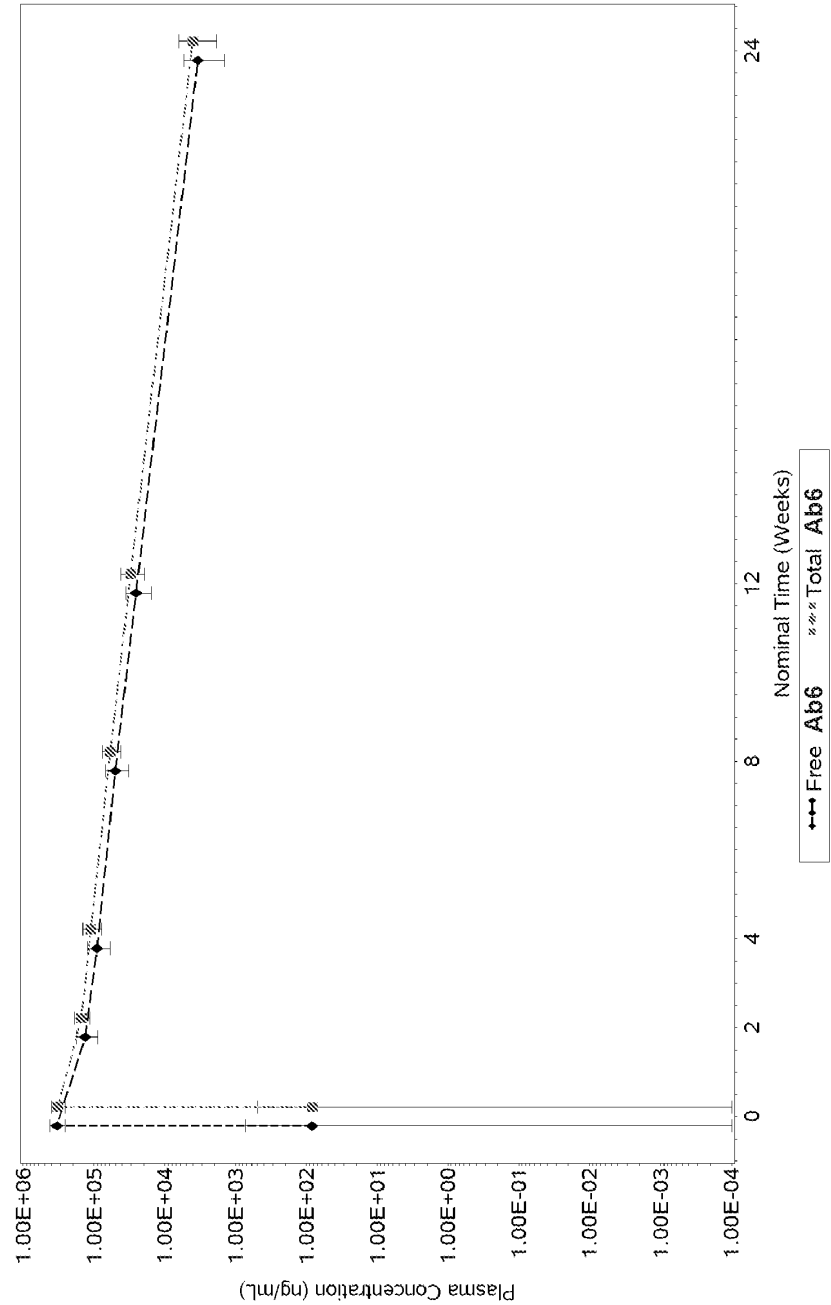


FIG. 21. PK Parameters

Plasma Free Ab6*

	C _{max} (µg/mL)	AUC _{0-∞} (mg*hr/mL)	Half-Life (Days)	V _z (L)	CL (mL/hr)
N	81	78	78	78	78
Mean	336	219	31	5.2	5.0
SD	80	64	8	2.1	1.5

* - Following 1000 mg Ab6 IV single-dose

FIG. 22

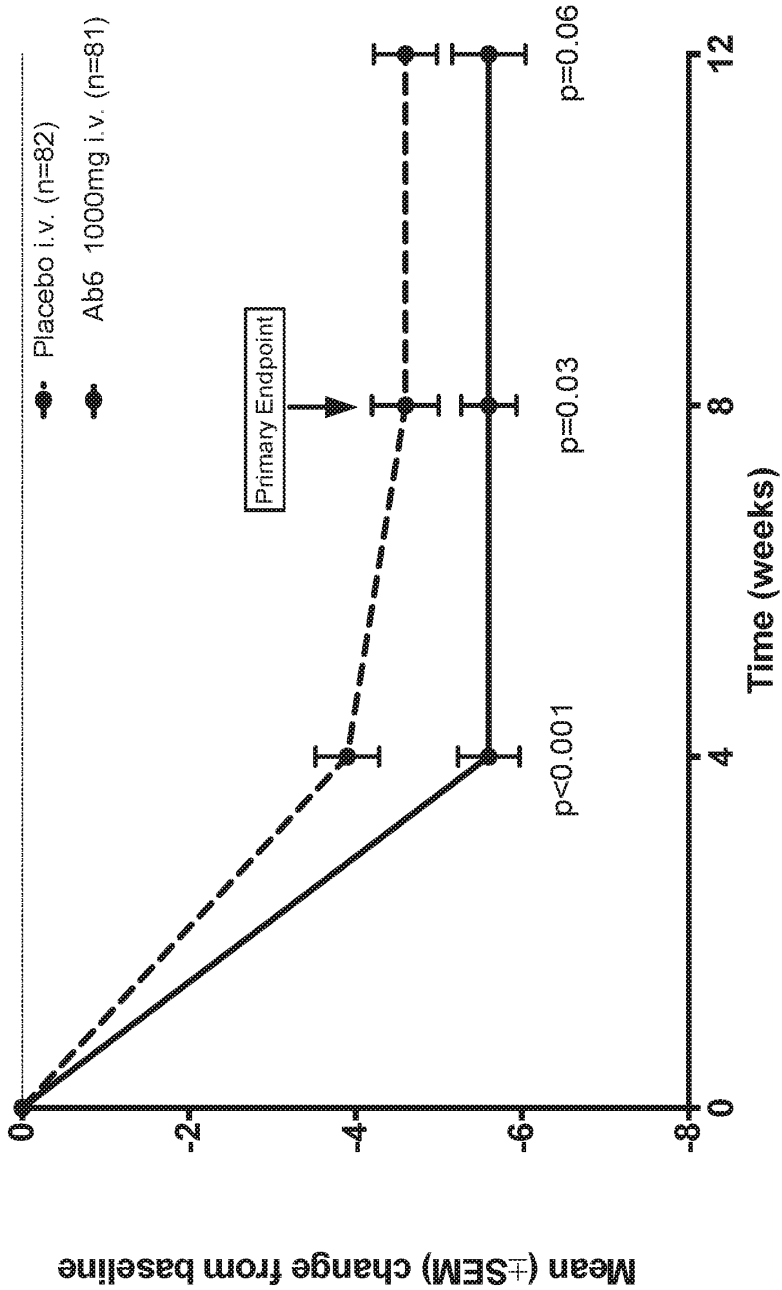


FIG. 23

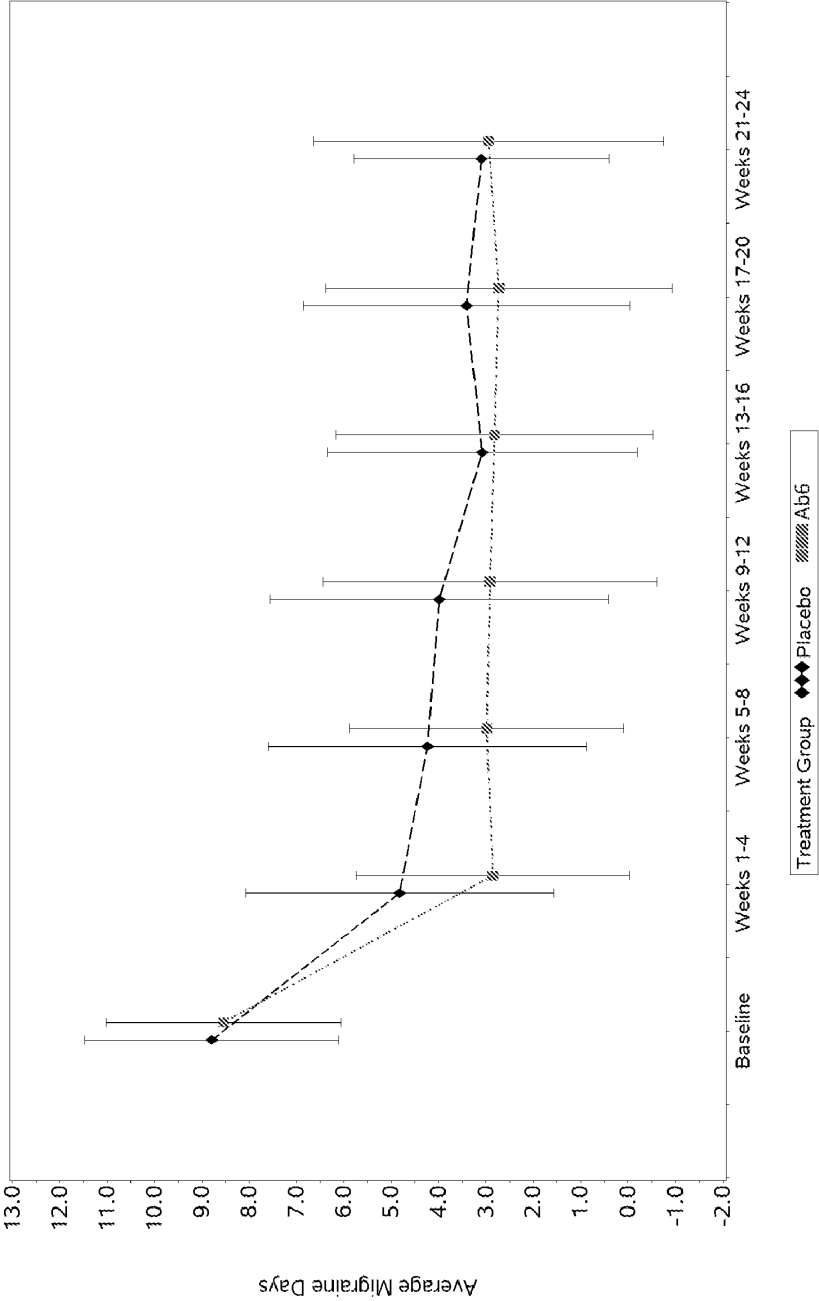


FIG. 24

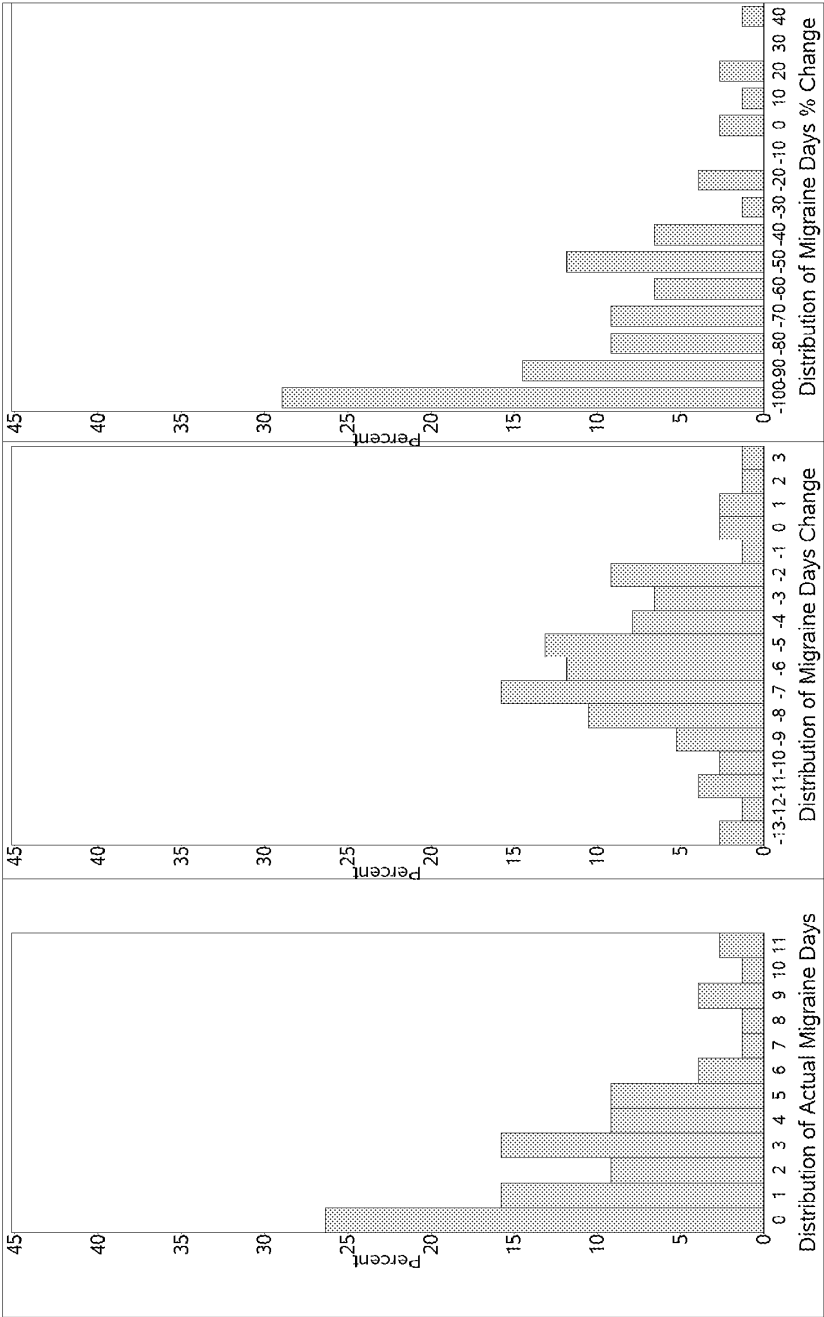


FIG. 25

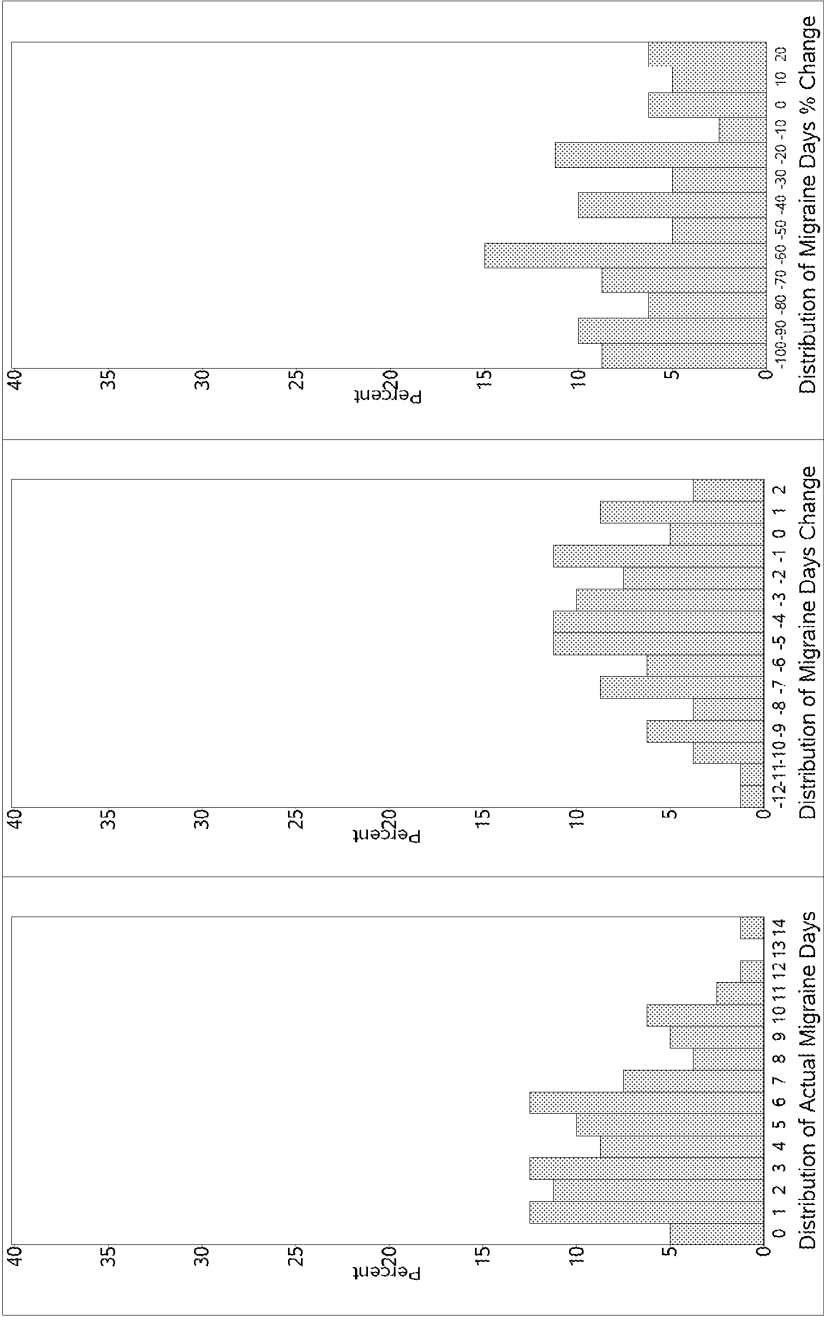


FIG. 26

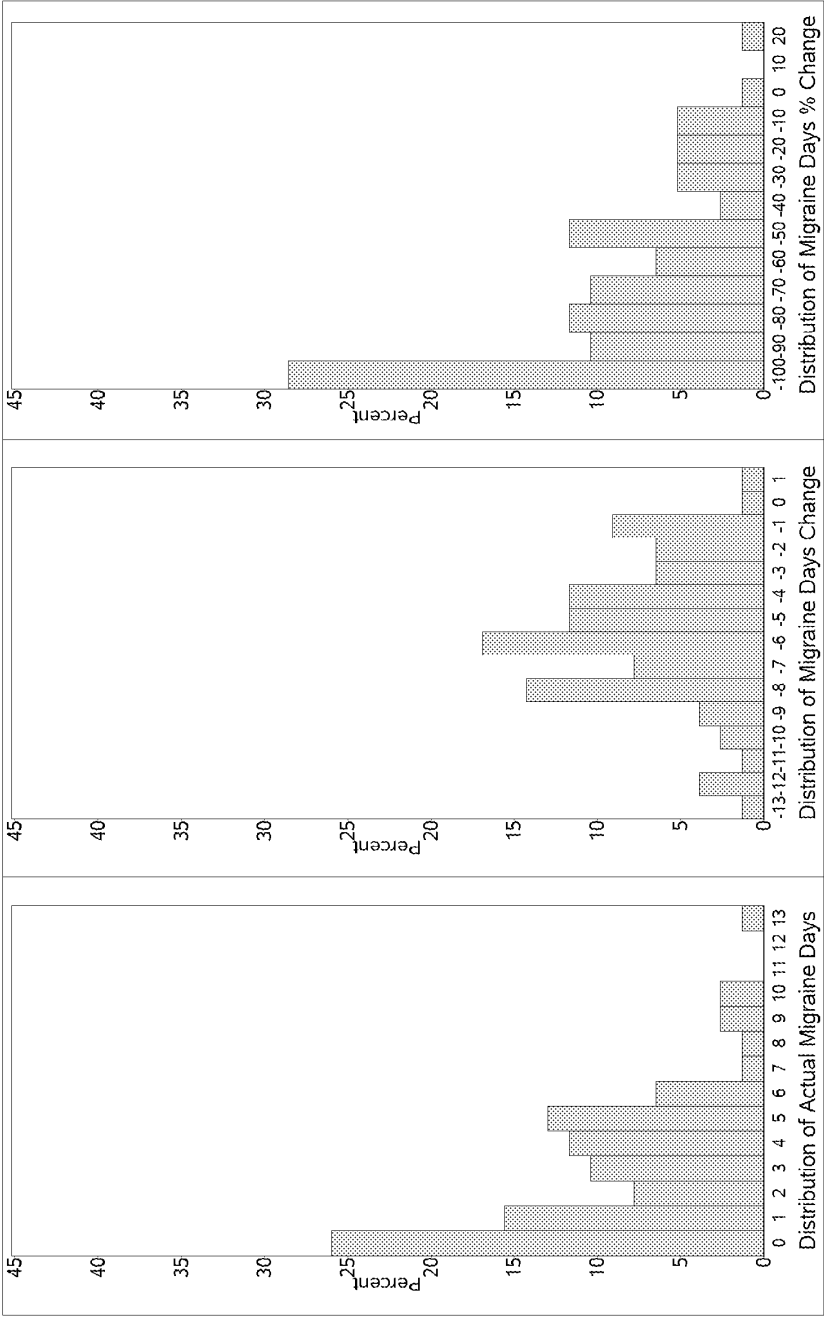


FIG. 27

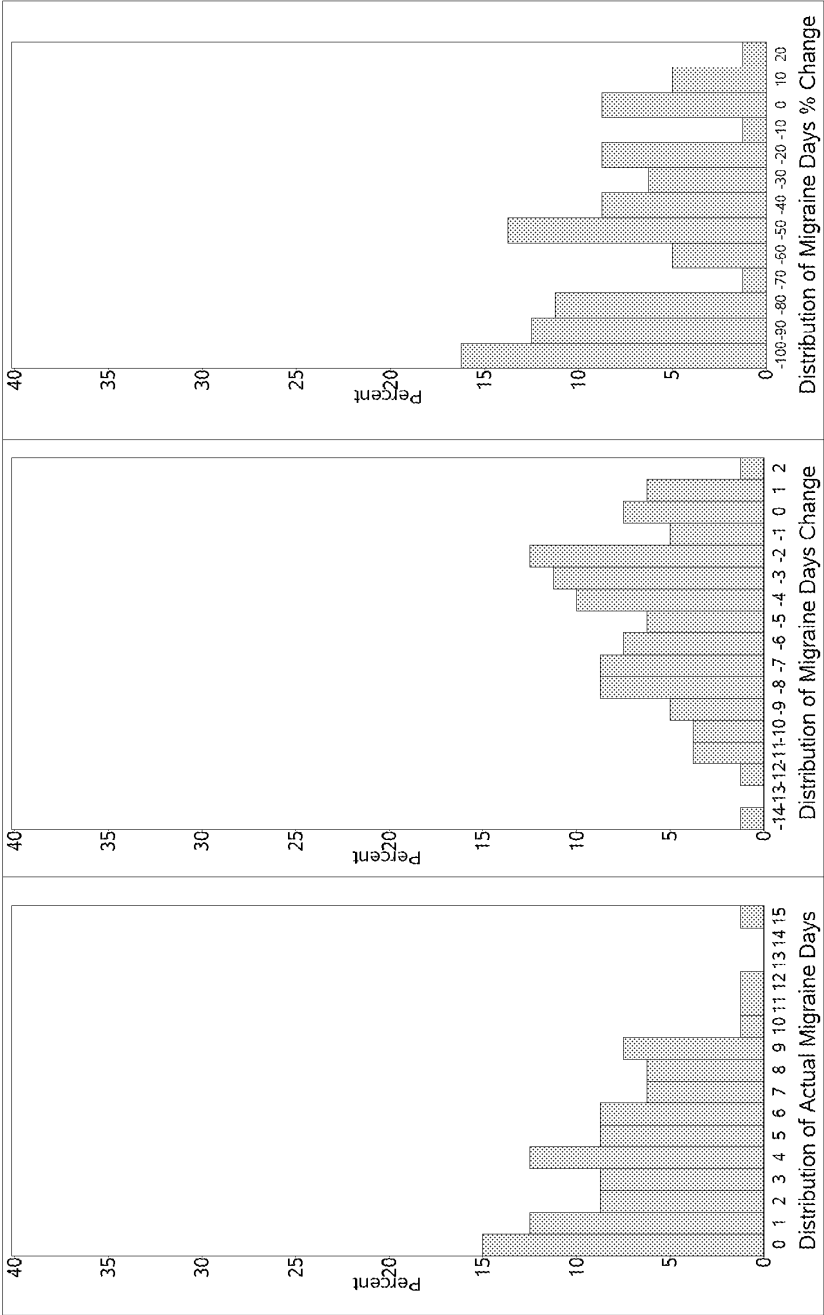


FIG. 28

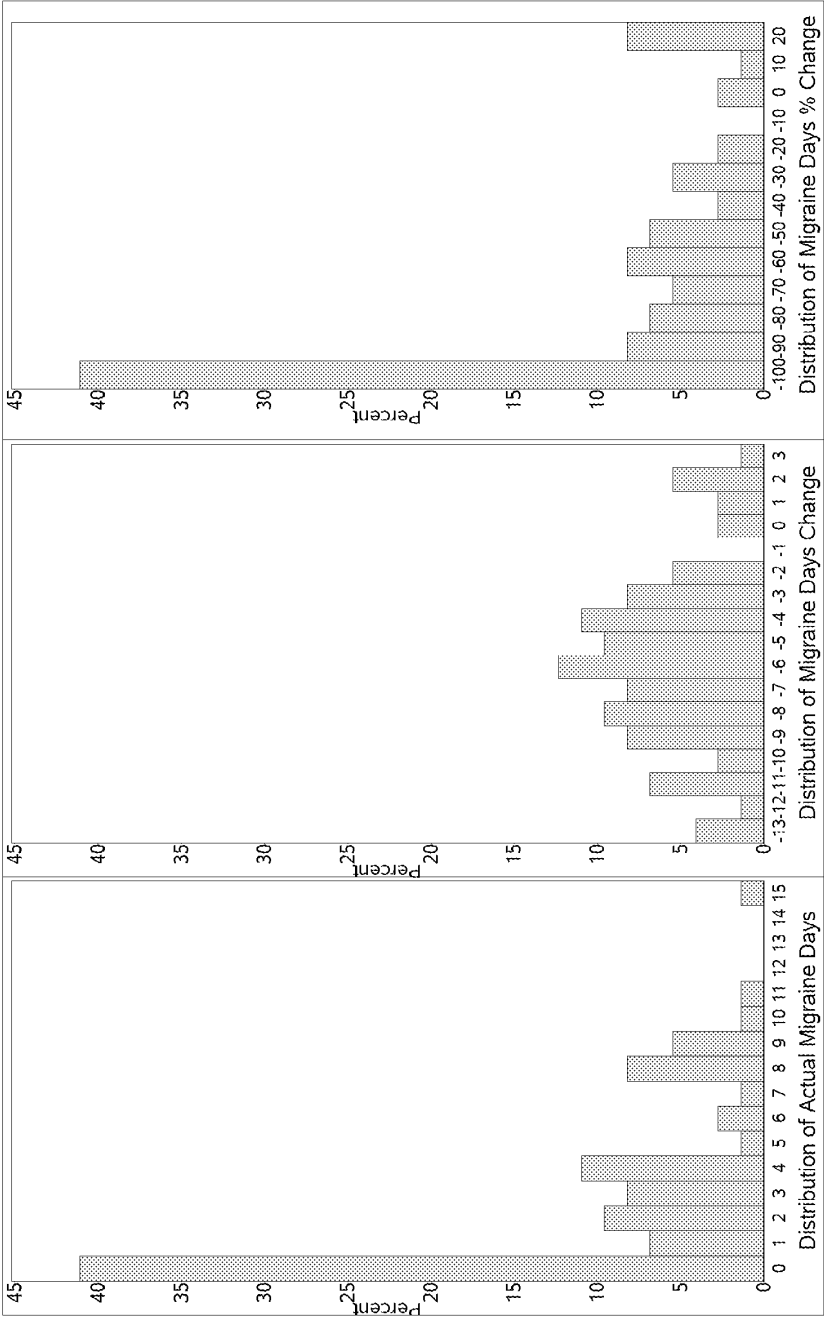


FIG. 29

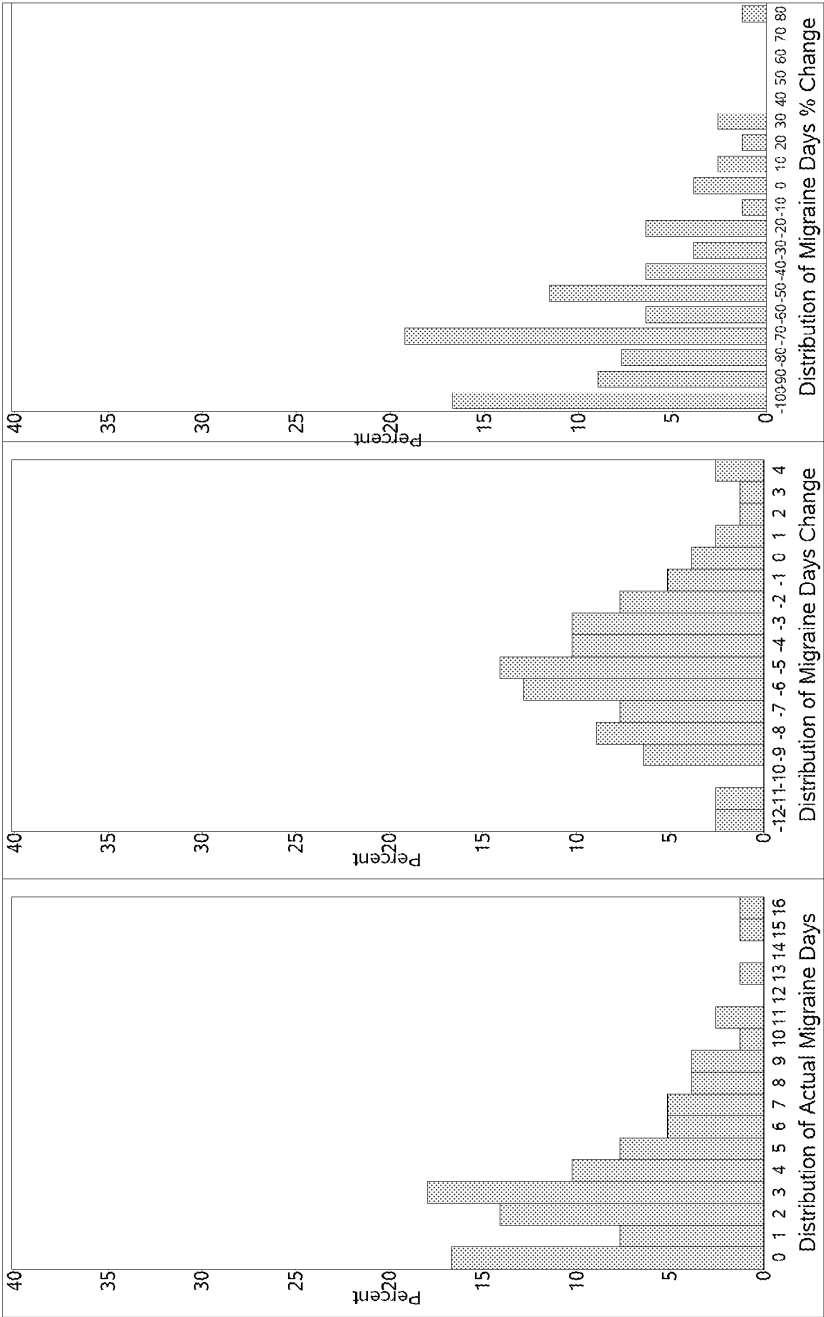


FIG. 30

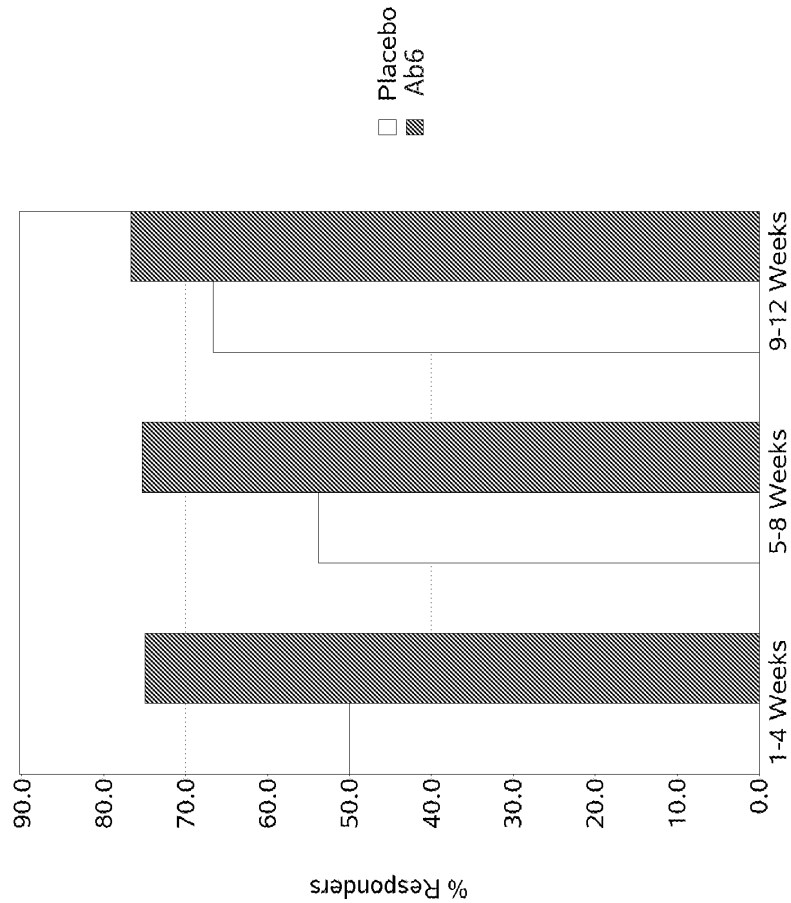


FIG. 31

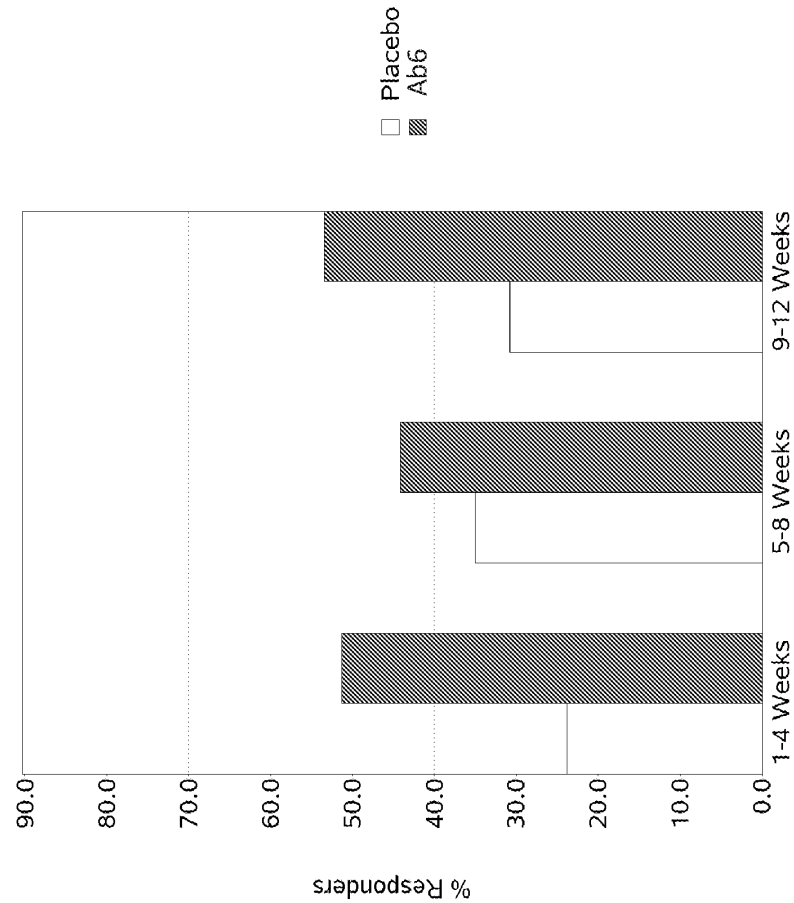


FIG. 32

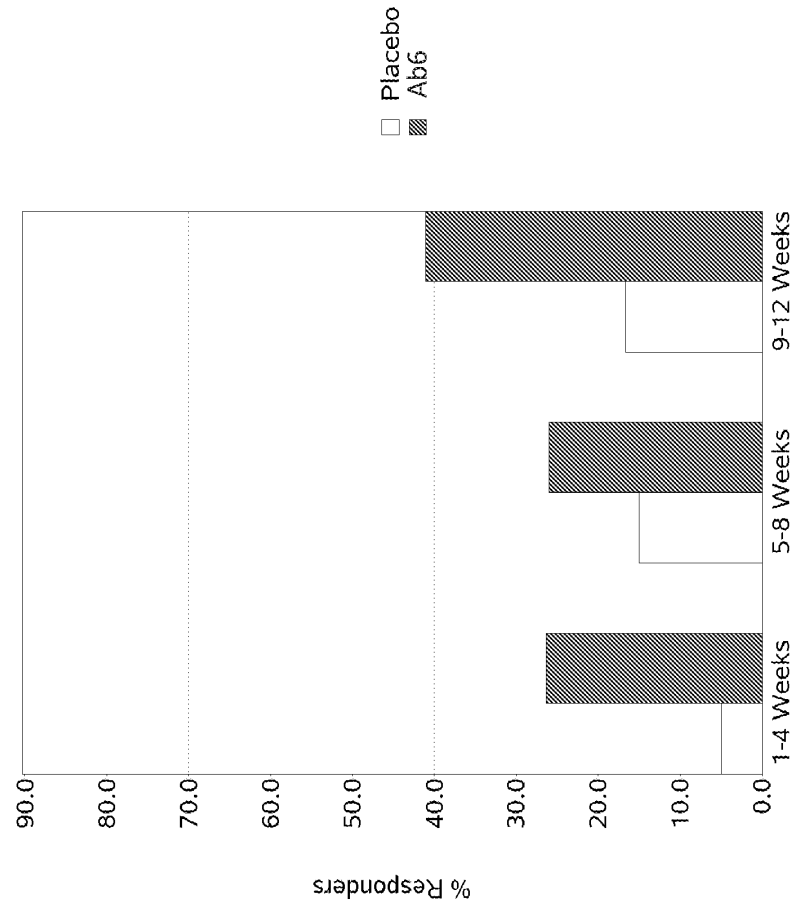


FIG. 33

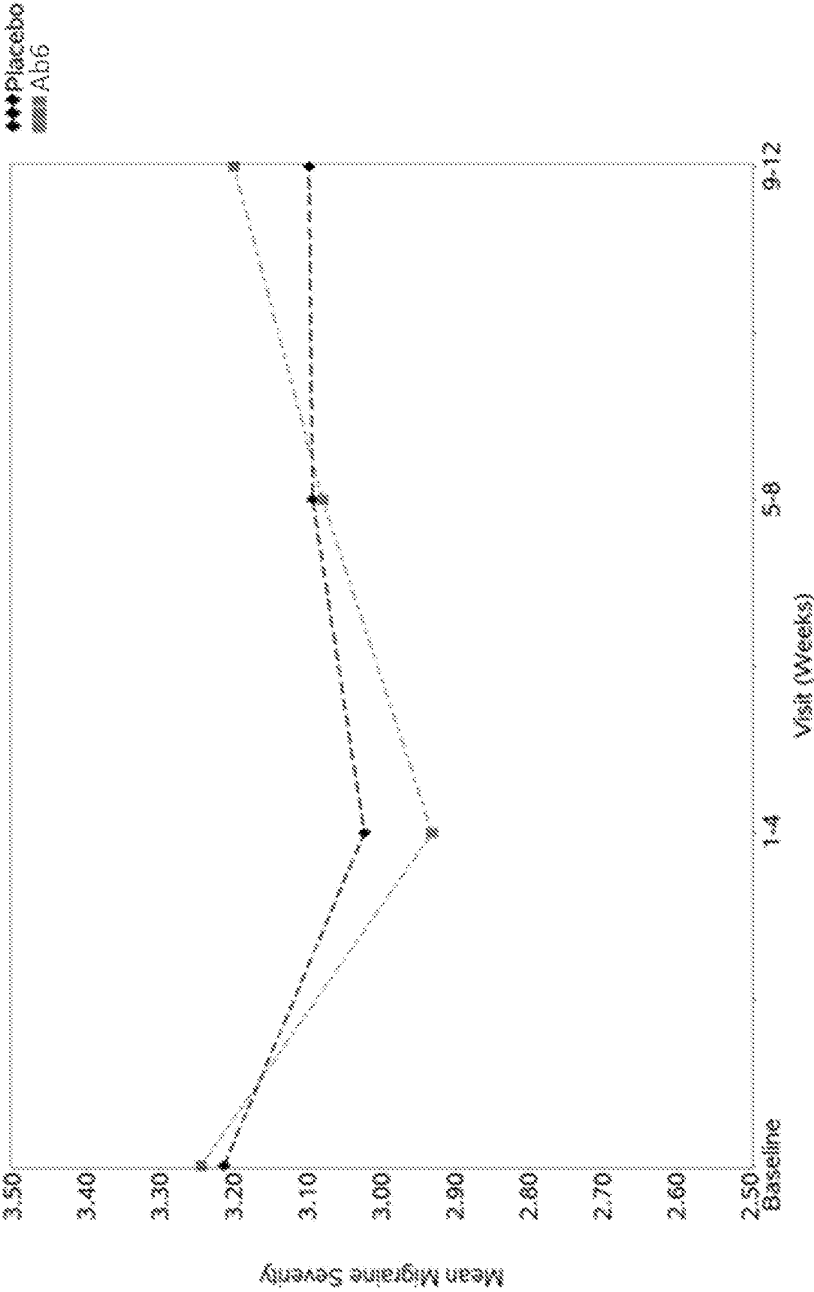


FIG. 34. Mean ($\pm$ SD) Change from Baseline In Study Endpoints						
Endpoint	Weeks 1-4		Weeks 5-8		Weeks 9-12	
	Placebo i.v. (n=82)	Ab6 1000mg i.v. (n=81)	Placebo i.v. (n=82)	Ab6 1000mg i.v. (n=81)	Placebo i.v. (n=82)	Ab6 1000mg i.v. (n=81)
Migraine Days	-3.9 (3.5)	-5.6 (3.3) ¹	-4.6 (3.6)	-5.6 (3.0) ²	-4.6 (3.5)	-5.6 (4.0) ³
Migraine Episodes	-3.0 (2.7)	-3.7 (2.4)	-3.7 (2.9)	-3.8 (2.2)	-3.7 (2.8)	-3.9 (2.6)
Migraine Hours	-33.7 (41.8)	-58.0 (49.1)	-36.1 (45.9)	-54.4 (48.3)	-37.1 (40.0)	-54.6 (60.5)
Average Migraine Severity ⁴	-0.16 (0.58)	-0.31 (0.58)	-0.10 (0.54)	-0.16 (0.50)	-0.08 (0.54)	-0.11 (0.43)
Headache Frequency	-4.0 (3.8)	-5.6 (3.4)	-5.0 (3.7)	-5.3 (3.5)	-5.1 (3.7)	-5.9 (3.8)
HIT-6 score	-5.8 (7.8)	-10.2 (9.8)	-8.1 (8.9)	-9.9 (9.7)	-7.7 (9.0)	-10.1 (10.6)
MSQ RFP	19.9 (23.8)	29.3 (24.3)	25.2 (24.8)	28.8 (24.7)	22.2 (23.1)	28.5 (24.5)
MSQ RFR	16.3 (23.2)	21.1 (23.9)	20.2 (22.1)	20.9 (23.3)	18.0 (20.5)	21.4 (23.1)
MSQ EF	19.4 (27.6)	25.1 (28.3)	21.2 (25.1)	23.8 (25.8)	21.1 (25.1)	23.1 (26.8)

¹p<0.001; ²p=0.03; ³p=0.06; ⁴Severity measured on a 4 point scale with 1= mild and 4 = severe

FIG. 35

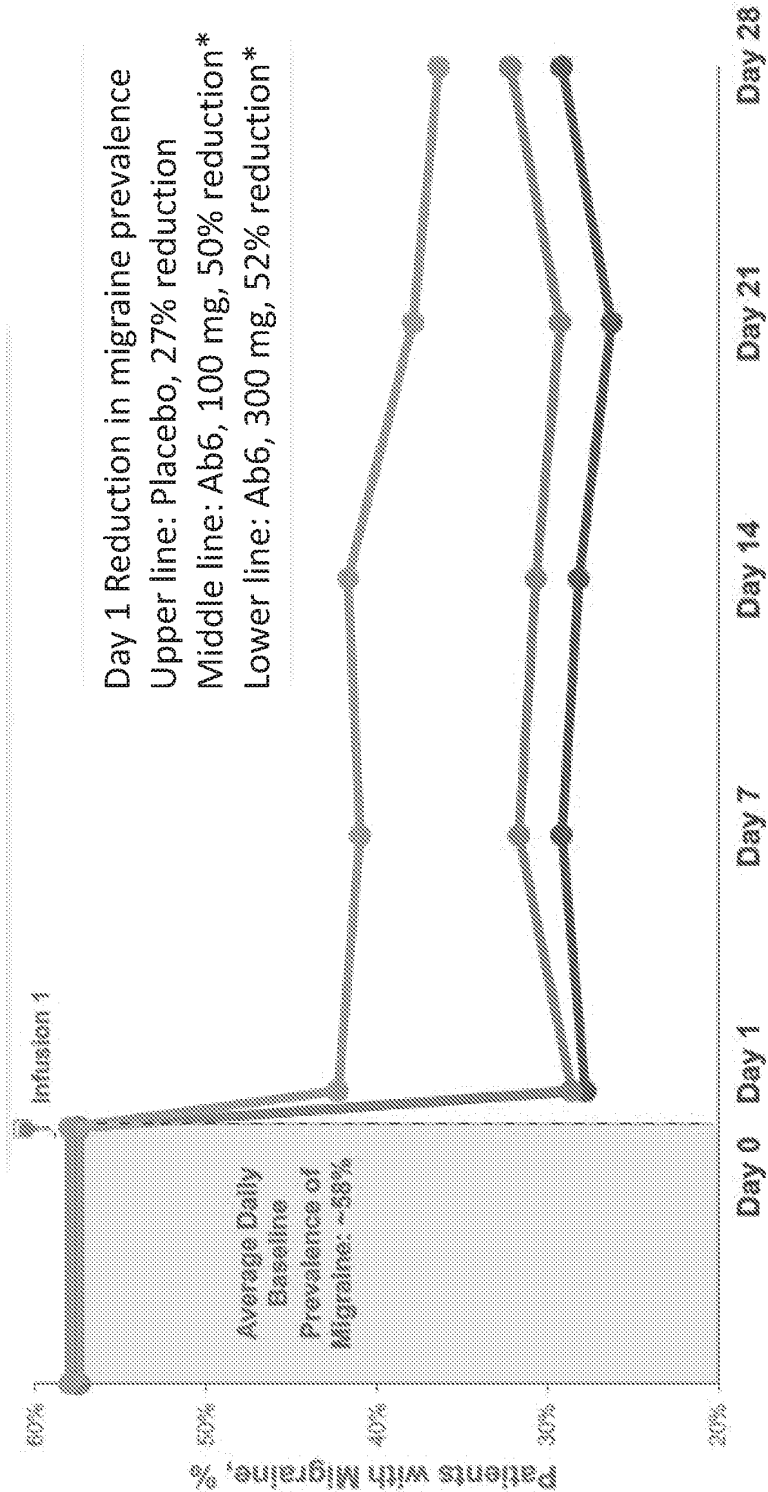


FIG. 36. Chronic migraine $\geq 50\%$ responder rates

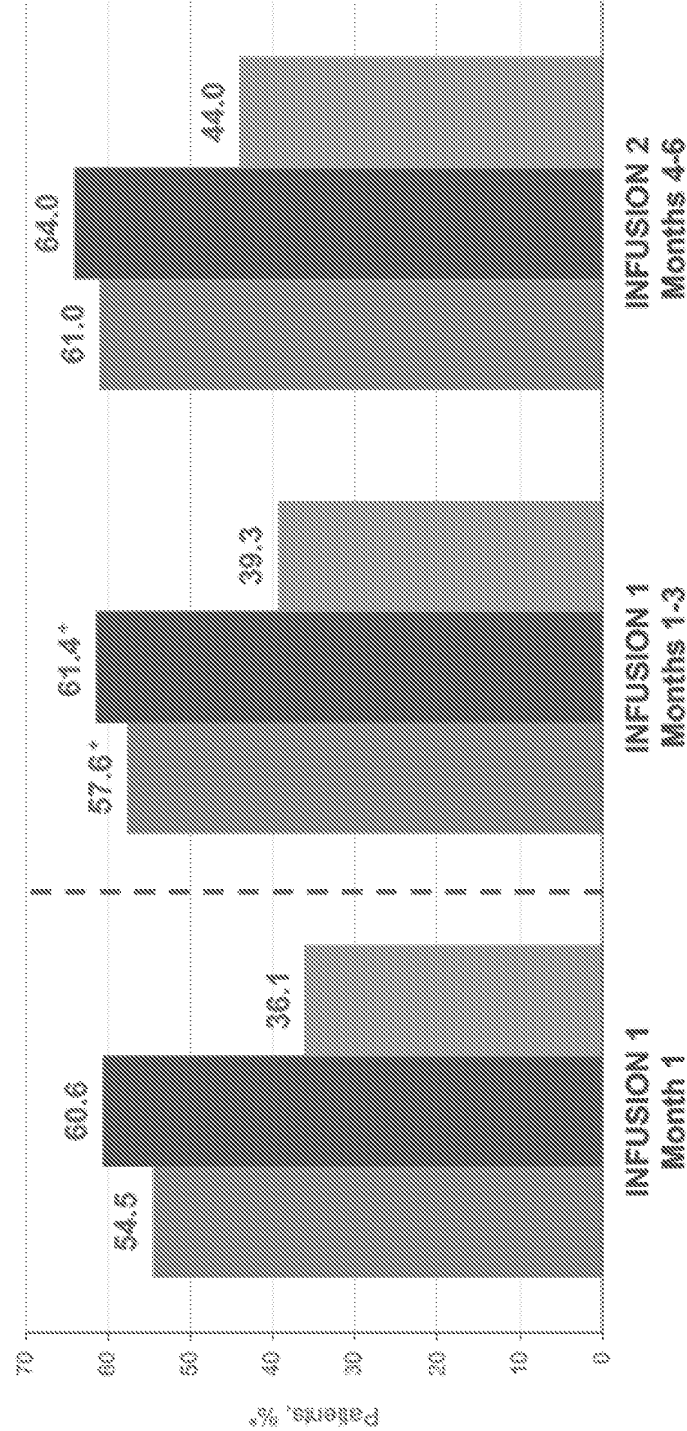


FIG. 37. Chronic migraine $\geq 75\%$ responder rates

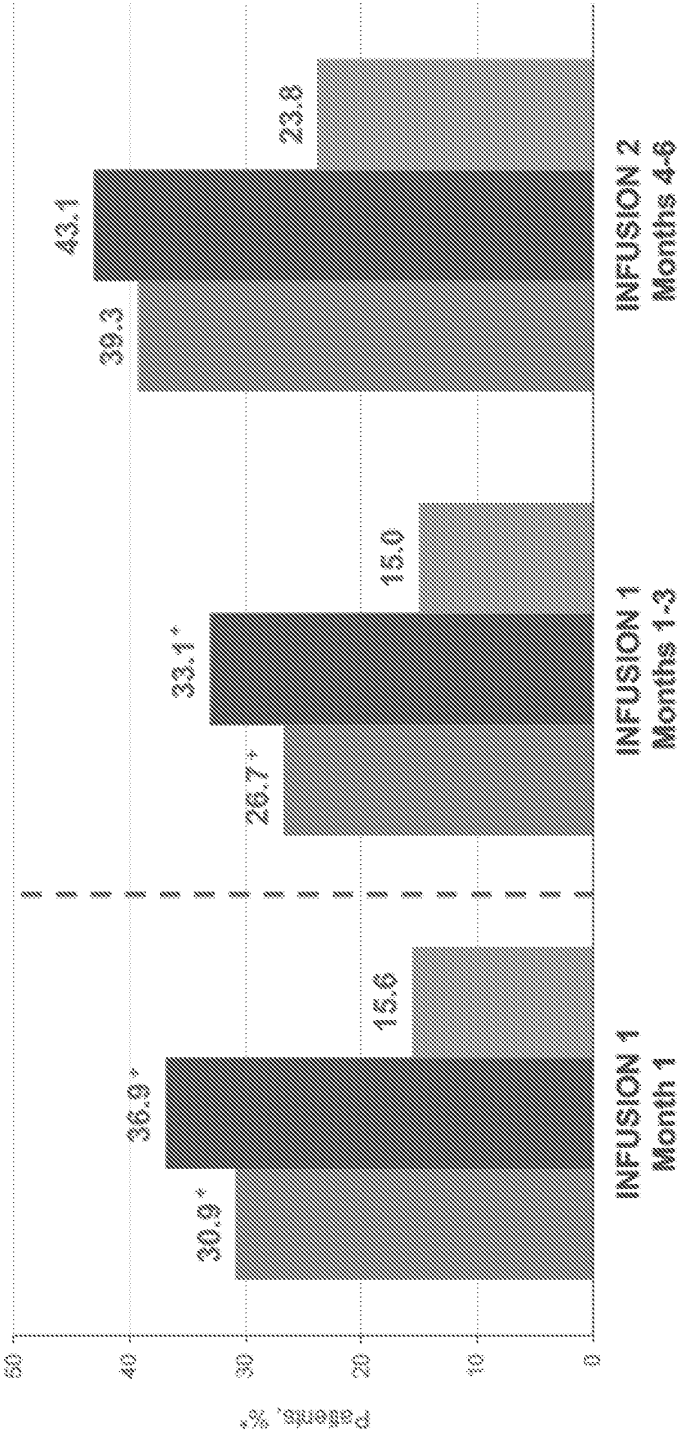


FIG. 38. Chronic migraine 100% responder rates

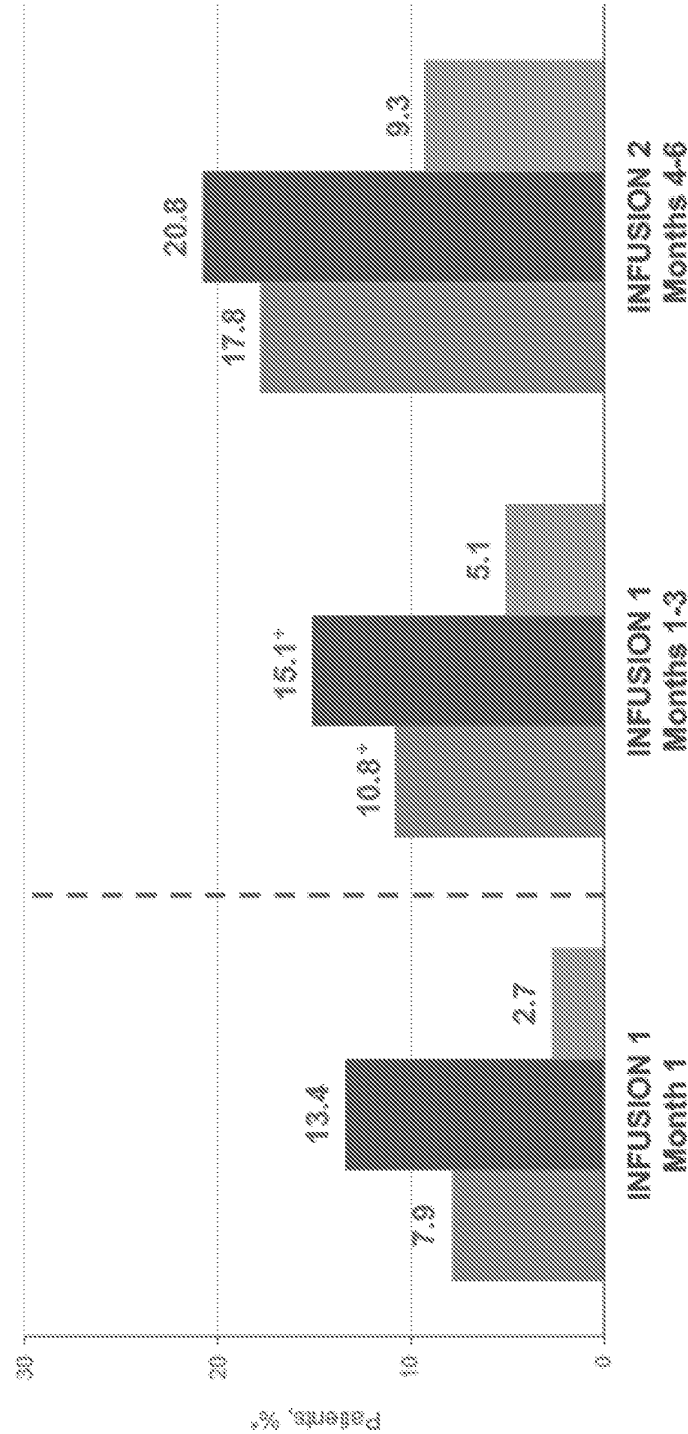


FIG. 39

	Placebo	100 mg	300 mg
Subjects, n	366	356	350
Mean age, years (SD)	39.6 (11.3)	41.0 (11.7)	41.0 (10.4)
Mean BMI, kg/m ² (SD)	27.0 (5.6)	26.4 (5.0)	26.3 (5.0)
Female, %	89	86	90
Mean years from migraine diagnosis	17.0	18.3	19.0
Mean duration of chronic migraine, years (SD)	11.6 (10.9)	11.6 (11.7)	12.4 (11.2)
≥1 prophylactic medication, n (%) [*]	163 (44.5)	161 (45.2)	155 (44.3)
Mean migraine days/month (SD)	16.2 (4.6)	16.1 (4.6)	16.1 (4.8)
Mean headache days/month (SD)	20.6 (3.0)	20.4 (3.1)	20.4 (3.2)

FIG. 40. Difference from placebo in change from baseline in mean migraine days (MMD) over months 1-3 by baseline subgroup

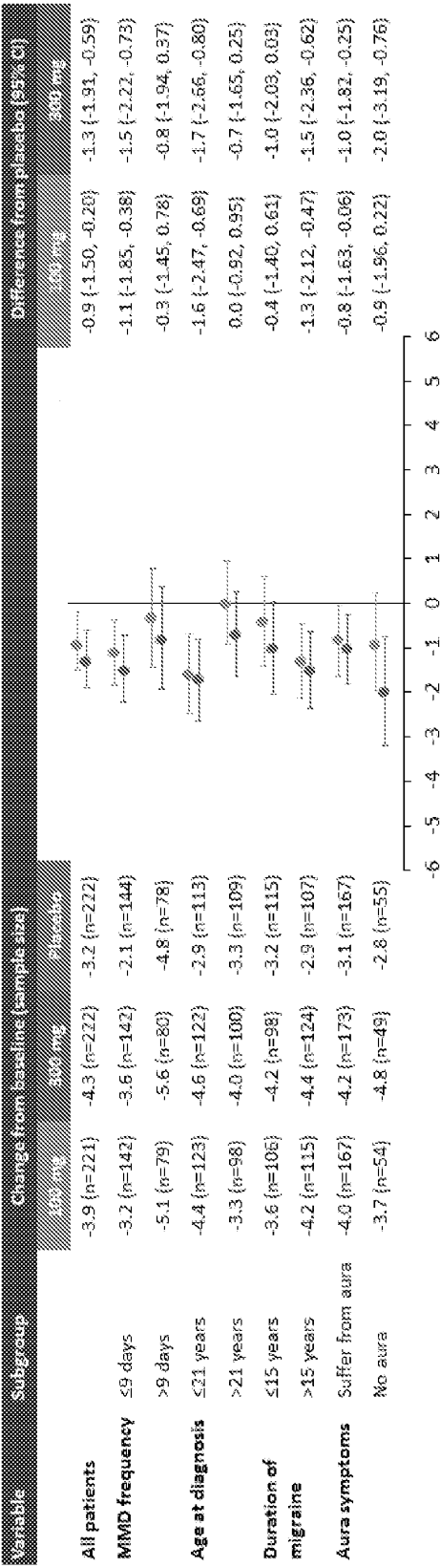


FIG. 41. Difference from placebo in change from baseline in mean migraine days (MMD) over months 1-3 by baseline subgroup

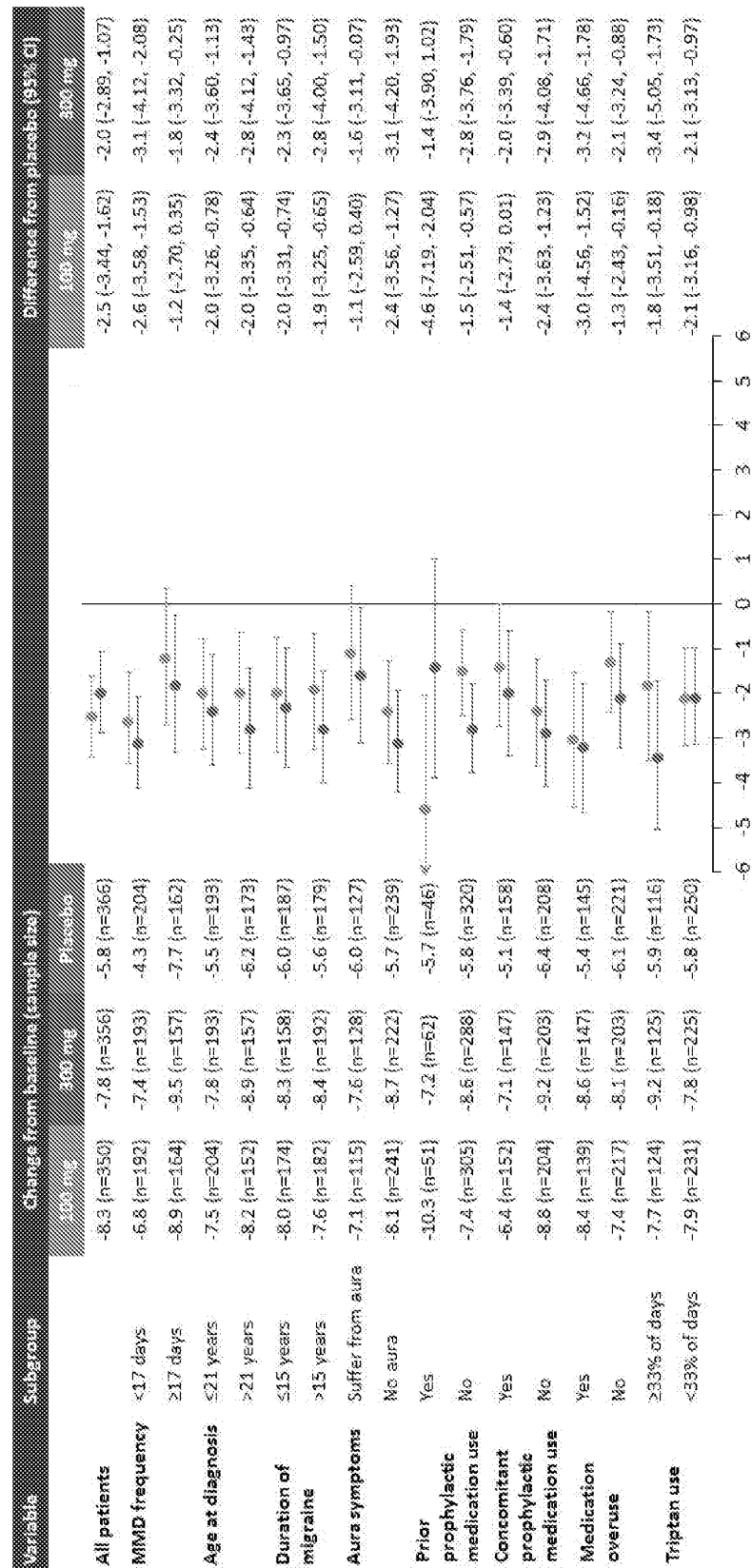
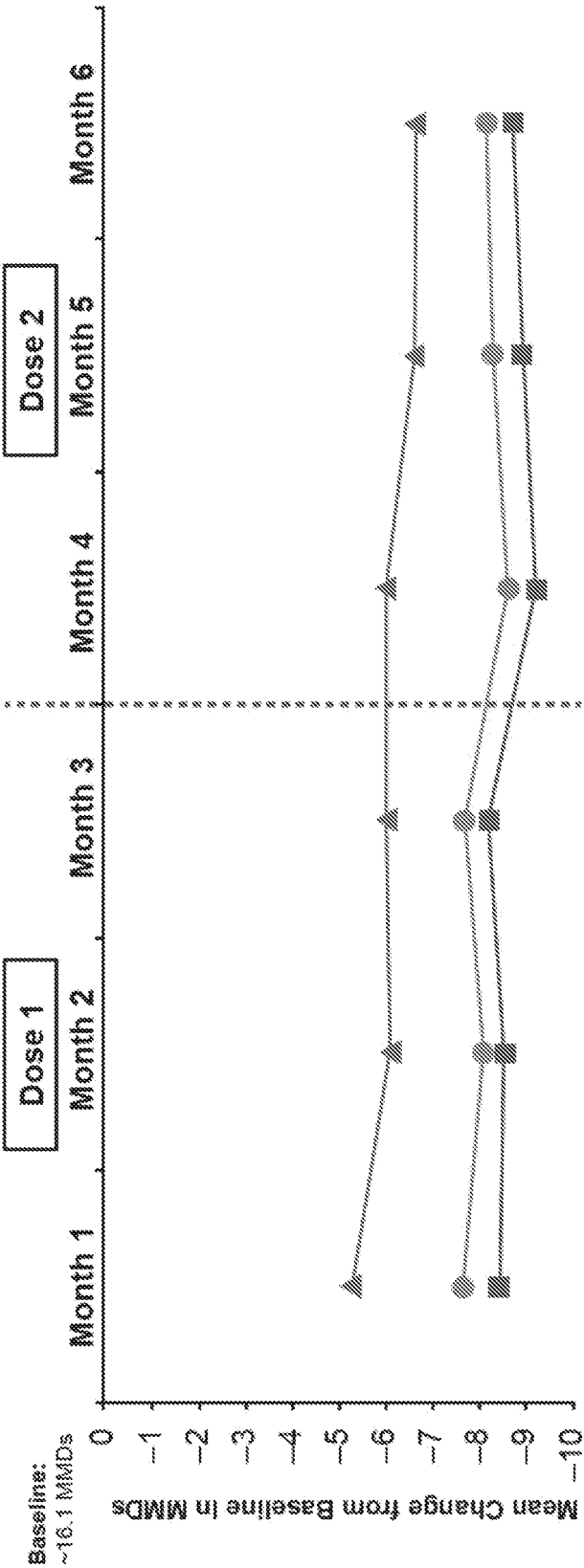


FIG. 42.



57/64

FIG. 43.

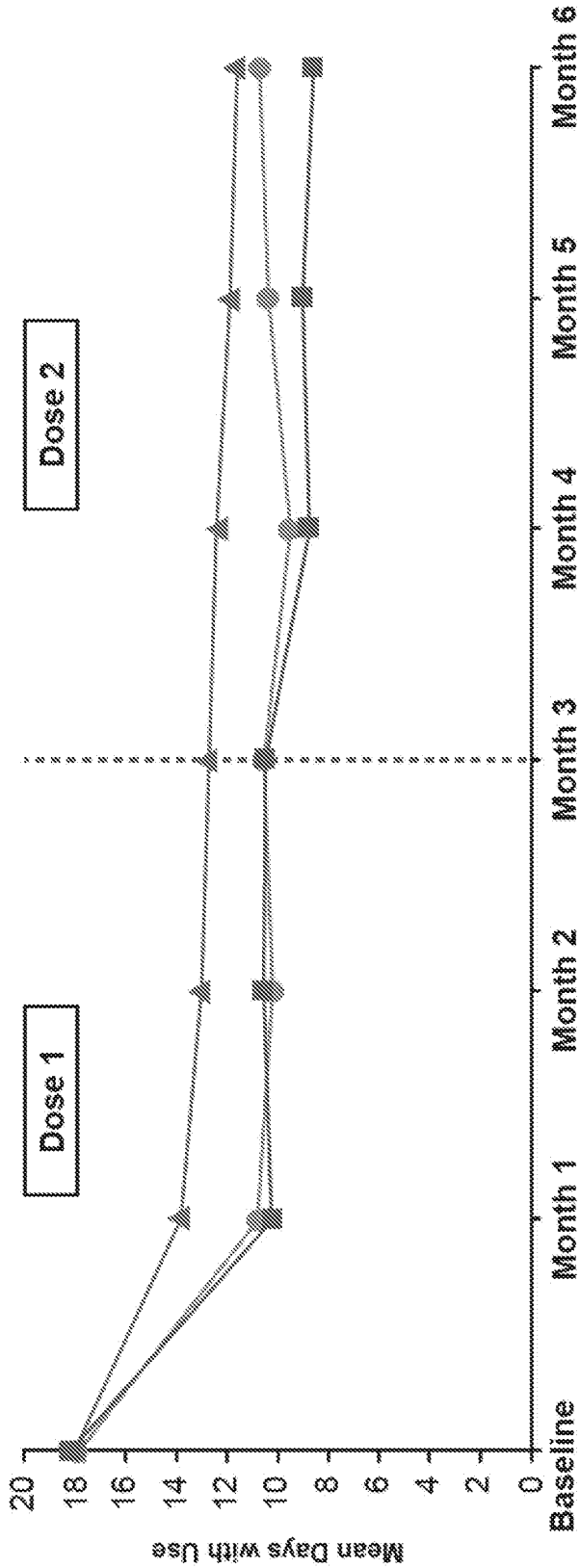


FIG. 44.

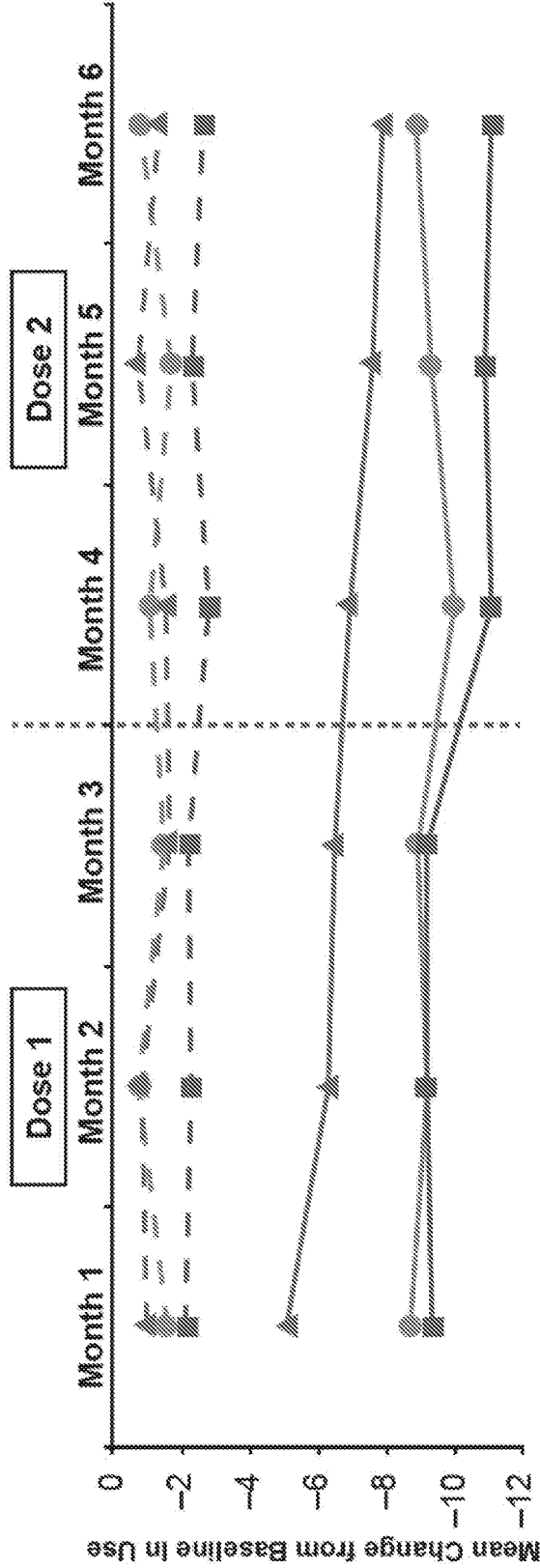
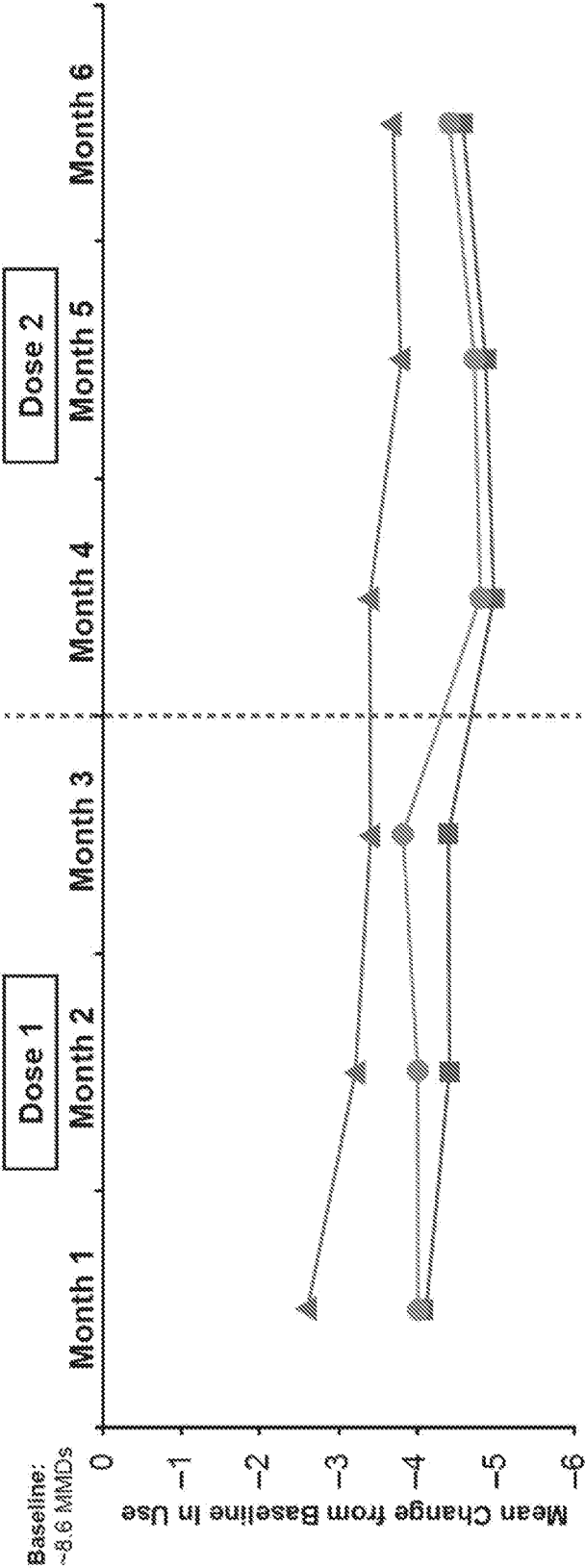


FIG. 45.

	Month 1			Month 6		
	Ab6 100 mg	Ab6 400 mg	Placebo	Ab6 100 mg	Ab6 400 mg	Placebo
Baseline use						
1–9 days/month, n	37	49	49	37	49	49
≥10 days/month, n	264	265	260	264	265	260
≥1 day/month, mean (SD)	18.3 (9.05)	18.4 (9.61)	17.9 (8.60)	18.3 (9.05)	18.4 (9.61)	17.9 (8.60)
Post-baseline use, mean (SD)						
≥1 day/month	10.7 (9.39)	10.2 (9.87)	13.8 (9.52)	10.8 (11.18)	8.6 (9.97)	11.5 (10.16)
Change from baseline, mean (SD)						
≥1 day/month	-7.8 (8.08)	-8.3 (7.64)	-4.5 (7.46)	-8.1 (9.90)	-9.6 (9.92)	-7.0 (9.39)
1–9 days/month	-1.5 (4.44)	-2.3 (4.34)	-1.0 (5.29)	-0.8 (6.63)	-2.6 (4.57)	-1.3 (4.83)
≥10 days/month	-8.7 (8.08)	-9.4 (7.62)	-5.1 (7.63)	-8.9 (9.88)	-11.1 (10.10)	-7.9 (9.64)
Percent change from baseline, mean (SD)						
≥1 day/month	-42.6 (39.98)	-47.0 (40.90)	-22.4 (52.02)	-40.7 (60.66)	-52.9 (48.97)	-34.7 (58.48)
1–9 days/month	-31.8 (67.95)	-47.3 (65.38)	-9.5 (100.52)	1.4 (132.84)	-45.0 (73.05)	-11.2 (108.44)
≥10 days/month	-44.1 (34.24)	-47.0 (34.73)	-24.8 (36.17)	-45.3 (44.91)	-54.5 (42.52)	-38.5 (44.63)

FIG. 46.



61/64

FIG. 47.

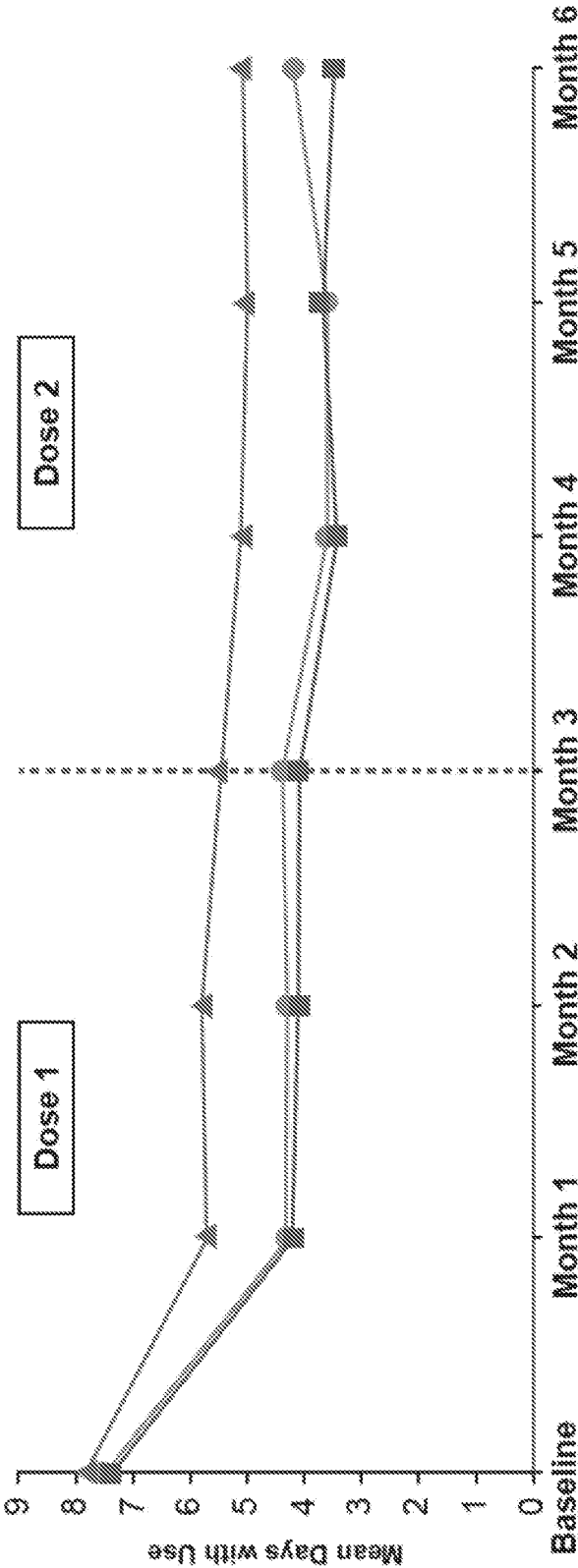


FIG. 48.

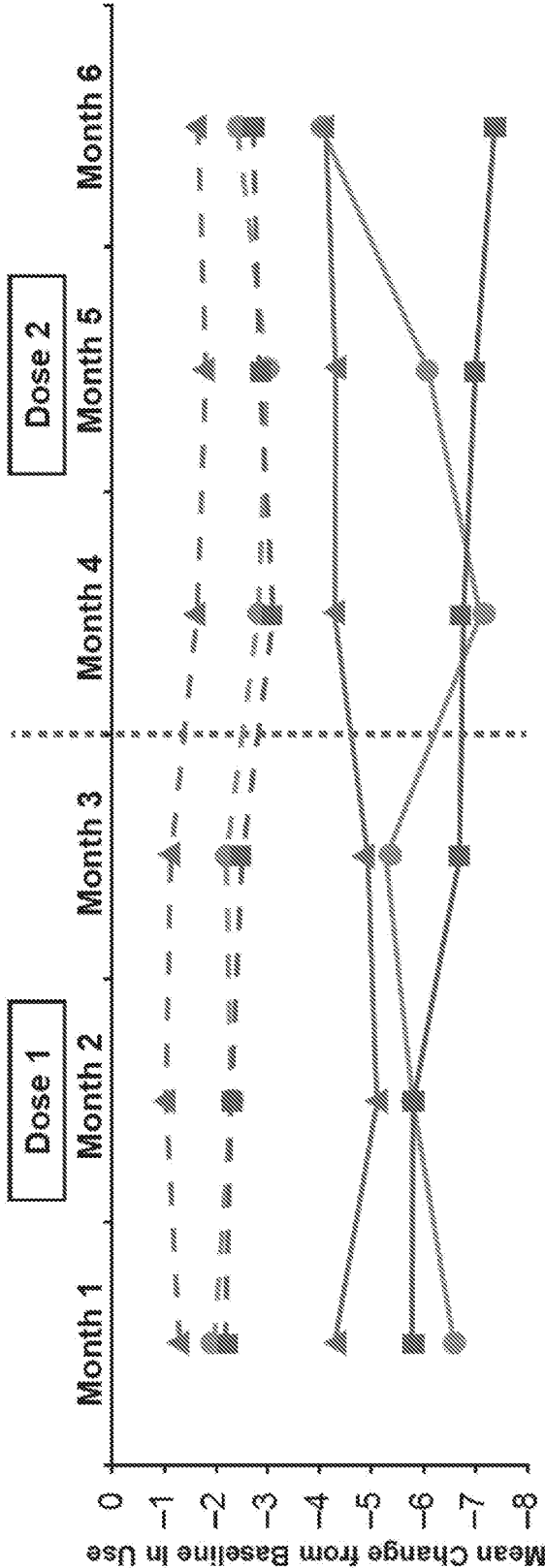


FIG. 49. Summary of Acute Medication Days by Subgroups of Episodic Migraine Patients with Baseline Acute Medication Use

	Month 1		Month 6	
	Ab6 100 mg	Ab6 400 mg	placebo	placebo
Baseline use				
1-9 days/month, n	117	111	108	108
≥10 days/month, n	42	41	44	44
≥1 day/month, mean (SD)	7.5 (4.97)	7.5 (4.58)	7.8 (4.98)	7.8 (4.98)
Post-baseline use, mean (SD)				
≥1 day/month	4.3 (3.99)	4.2 (4.45)	5.7 (5.04)	5.1 (5.19)
Change from baseline, mean (SD)				
≥1 day/month	-3.3 (4.14)	-3.2 (4.20)	-2.2 (4.68)	-2.3 (4.69)
1-9 days/month	-2.0 (2.91)	-2.2 (3.57)	-1.3 (3.10)	-1.6 (3.52)
≥10 days/month	-6.6 (5.11)	-5.8 (4.66)	-4.3 (6.82)	-4.1 (6.60)
Percent change from baseline, mean (SD)				
≥1 day/month	-36.9 (63.96)	-39.4 (77.71)	-22.4 (60.27)	-22.5 (95.61)
1-9 days/month	-33.9 (72.22)	-37.0 (88.45)	-19.7 (64.62)	-18.2 (107.55)
≥10 days/month	-45.1 (30.26)	-45.9 (34.95)	-29.1 (47.94)	-33.9 (52.53)

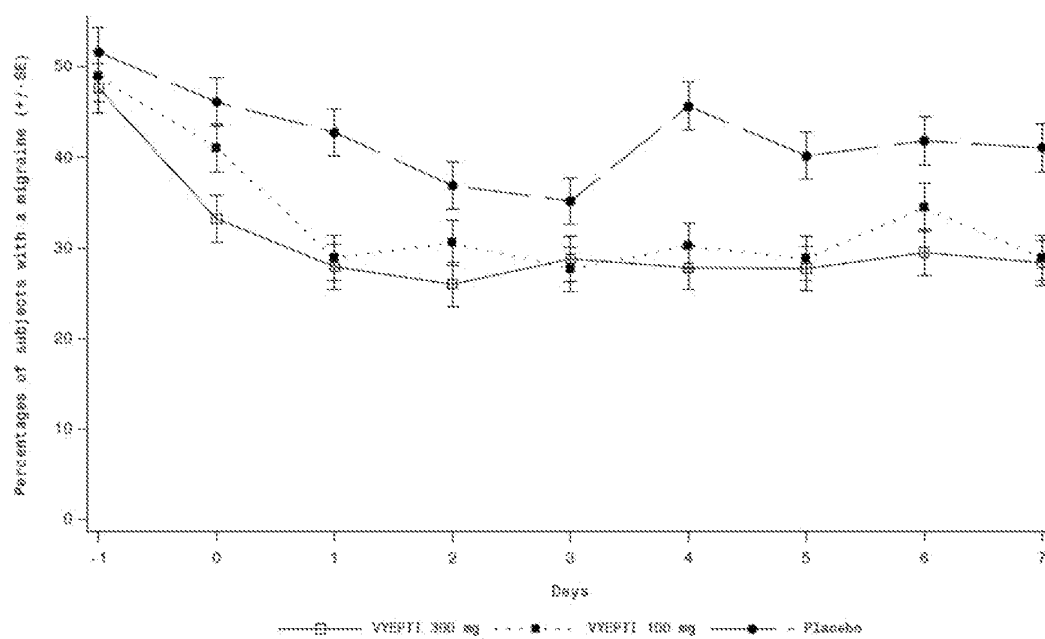


FIG 50