FIGURE 1A

Heavy Chain

MuIgV$_H$5′-B L V A T A T G V H

AATGGAGCTG GGTTATTCTC TTCTTGGTAG CAACAGCTAC AGGTGTCCAC

S Q V Q L Q Q P G A E L V R P G A

TCCCAGGTCC AACTGCAGCA GCCTGGGGCT GAGCTGGTGA GGCCTGGGGC

S V K L S C K A S G Y T F T R N

TTCAGTGAAG CTGTCCTGCA AGGCTTCTGG CTACACCTTC ACCAGGAACT

W I N W V K Q R P G Q G L E W I G

GGATAAACTG GGTGAAGCAG AGGCCTGGAC AAGGCCTTGA GTGGATCGGA

N I Y P S D S Y T N Y N Q K F K D

AATATTTATC CTTCTGATAG TTATACTAAC TACAATCAAA AGTTCAAGGA

K A T V T V D K S S S T A Y M Q

CAAGGCCACA GTGACTGTAG ACAAATCCTC CAGCACAGCC TACATGCAGC

L S S P T S E D S A V Y Y C T R L

TCAGCAGCCC GACATCTGAG GACTCTGCGG TCTATTATTG TACAAGATTG

R G L L P D Y W G Q G T I L T V S

AGGGGTTTAT TACCTGACTA CTGGGGCCAA GGCACCATTC TCACAGTCTC

S E S Q S **MuIgMV$_H$3′-1**

CTCAGAGAGT CAGTCCTTCC CAAATGTCTT CCCCCTCGTA AGCTTGGG

FIGURE 1B

Light chain

MuIgκV_L5′-A V Y M L L W

GGGAATTCAT GGAGTCACAG ACCCAGGTCT TTGTATACAT GTTGCTGTGG

L S G V D G D I V M T Q S Q K F M

TTGTCTGGTG TTGATGGAGA CATTGTGATG ACCCAGTCTC AAAAATTCAT

S T S V G D R V S V T C K A S Q

GTCCACATCA GTAGGAGACA GGGTCAGCGT CACCTGCAAG GCCAGTCAGA

N V D T N V A W Y Q Q K P G Q S P

ATGTGGATAC TAATGTAGCC TGGTATCAAC AGAAACCAGG GCAATCTCCT

K A L I Y S A S Y R Y S G V P D R

AAAGCACTGA TTTACTCGGC ATCCTACCGG TACAGTGGAG TCCCTGATCG

F T G S G S G T D F T L T I S N

CTTCACAGGC AGTGGATCTG GGACAGATTT CACTCTCACC ATCAGCAATG

V Q S E D L A E Y F C Q Q Y N S Y

TGCAGTCTGA AGACTTGGCA GAGTATTTCT GTCAGCAATA TAACAGCTAT

P L T F G A G T K L E L K R A D A

CCTCTCACGT TCGGTGCTGG GACCAAGCTG GAGCTGAAAC GGGCTGATGC

A P T V **MuIgκV_L3′-1**

TGCACCAACT GTA TCCATCT TCCCACCATC CAGTAAGCTT



FIG. 2



FIG. 3a



FIG. 3b

FIGURE 4A

Cell line 13.42a VH-1 DNA Sequence (SEQ ID NO:17)

AGGTCAAGCTGCAGGAGTCAGGACCTGAGCTGGTGAAGCCTGGGGCTTCAGTGAAGGTATC
CTGCAAGGCTTCTGGTTATGCATTCACTAGCTACAACATGTTCTGGGTGAAGCAGAGCCAT
GGAAAGAGCCTTGAGTGGATTGGATATATTGATCCTTACAATGGTGATACTAGATACAGCC
AGAAGTTCAAGGGCAAGGCCACATTGACTGTTGACAAGTCCTCCAGCACAGCCTACATGCA
TCTCAACAGCCTGACATCTGAAGACTCTGCAGTCTATTACTGTGCAAGAAAGGGGATGACG
ACGGGCTATGCTATGGACTACTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA

Cell line 13.42a VH-1 Amino Acid Sequence (SEQ ID NO:18)

VKLQESGPELVKPGASVKVSCKAS**GYAFTSYNMFW**VKQSHGKSLEWIG**YIDPYNGDTRYSQ**
KFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCAR**KGMTTGYA**MDYWGQGTTVTVSS

Cell line 13.42a VL DNA sequence (SEQ ID NO:19)

GACATCCAGATGACTCAGTCTCCATCCTCCCTGTCTGCCTCTCTGGGAGACAGAGTCACCA
TCAGTTGTAGGGCAAGTCAGGACATTAGTAATTATTTAAACTGGTATCAGCAGAAACCAGA
TGGAACTGTTAAACTCCTGCTCTACTACACATCAAGATTACACTCAGGAGTCCCATCAAGG
TTCAGTGGCAGTGGGTCTGGAACAGATTATTCTCTCACCATTAGCAACCTGGAACAAGAAG
ATGTTGCCACTTACTTTTGCCAACAGGGTAATACGTTTCCGACGTTCGGTGGAGGCACCAA
GCTGGAAATCAAACGG

Cell line 13.42a VL Amino acid sequence (SEQ ID NO:20)

DIQMTQSPSSLSASLGDRVTISC**RASQDISNYLN**WYQQKPDGTVKLLLY**YTSRLHS**GVPSR
FSGSGSGTDYSLTISNLEQEDVATYFC**QQGNTFPTF**GGGTKLEIKR

FIGURE 4B

Cell line 32.15 VH DNA sequence (SEQ ID NO:33)

AGGTGCAACTGCAGGAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCAAGATCTC
CTGCAAGGCTTCTGGGTATACCTTCACAAACTATGGAATGAACTGGGTGAAGCAGGCTCCA
GGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCTACACTGGAGAGCCAACATATGCTG
ATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACCTCTGCCAGCACTGCCTATTTGCA
GATCAACAACCTCAAAAATGAGGACACGGCTACATATTTCTGTGCAAGGGAAGGGTTGTAT
GGTAACTACTTTGACTACTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA

Cell line 32.15 VH Amino acid sequence (SEQ ID NO:34)

VQLQESGPELKKPGETVKISCKAS**GYTFTNYGMNW**VKQAPGKGLKWMG**WINTYTGEPTYAD**
DFKGRFAFSLETSASTAYLQINNLKNEDTATYFCAR**EGLYGNYF**DYWGQGTTVTVSS

Cell line 32.15 VL DNA sequence (SEQ ID NO:35)

GACATCCAGATGACACAGTCTCCAAAATTCATGTCCACATCAGTAGGAGACAGGGTCAGCG
TCACCTGCAAGGCCAGTCAGAATGTGGGTACTAATGTAGCCTGGTATCAACAGAAACCAGG
GCAATCTCCTAAAGCACTGATTTACTCGGCATCCTACCGGTACAGTGGAGTCCCTGATCGC
TTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAATGTGCAGTCTGAAG
ACTTGGCAGAGTATTTCTGTCAGCAATATAACAGCTATCCTCTCACGTTCGGTGCTGGGAC
CAAGCTGGAGCTGAAACGG

Cell line 32.15 VL Amino acid sequence (SEQ ID NO:36)

DIQMTQSPKFMSTSVGDRVSVTC**KASQNVGTNVA**WYQQKPGQSPKALIY**SASYRYS**GVPDR
FTGSGSGTDFTLTISNVQSEDLAEYFC**QQYNSYPLT**FGAGTKLELKR

FIGURE 4C

Cell line 32.17 VH DNA sequence (SEQ ID NO:49)

AGGTCAAACTGCAGGAGTCAGGGGCTGAGCTGGTGAGGCCTGGGGCTTCAGTGAAGCTGTC
CTGCAAGGCTTCTGGCTACACCTTCACCAGGAACTGGATAAACTGGGTGAAGCAGAGGCCT
GGACAAGGCCTTGAGTGGATCGGAAATATTTATCCTTCTGATAGTTATACTAACTACAATC
AAAAGTTCAAGGACAAGGCCACAGTGACTGTAGACAAATCCTCCAGCACAGCCTACATGCA
GCTCAGCAGCCCGACATCTGAGGACTCTGCGGTCTATTATTGTACAAGATTGAGGGGTTTA
TTACCTGACTACTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA

Cell line 32.17 VH Amino acid sequence (SEQ ID NO:50)

VKLQESGAELVRPGASVKLSCKAS**GYTFTRNWINW**VKQRPGQGLEWIG**NIYPSDSYTNYNQ**
KFKDKATVTVDKSSSTAYMQLSSPTSEDSAVYYCTR**LRGLLPDY**WGQGTTVTVSS

Cell line 32.17 VL DNA sequence (SEQ ID NO:51)

GACATTGTGCTAACCCAATCTCCAGTATCCATAACTGCATCTCGAGGGGAGAAGGTCACCA
TCACCTGCCGTGCCAGCTCAAGTATAAGTTCCAATTACTTACACTGTTACCAGCAGAAGCC
AGGATCCTCCCCTAAACTTTTGATTTATAGGACATCCATCCTGGCATCTGGAGTCCTAGAC
AGCTTCAGTGGCAGTGGGTCTGAGAGCTCTTACACTCTGACAATCAGCTGCATGCAGGACG
AAGTTGCTGCCACTTACTATTGTCAGCAGGGGAGTAGTAGCCCCCTCACGTTCGGTGCTGG
GACCAAGCTGGAGCTGAAACGG

Cell line 32.17 VL Amino acid sequence (SEQ ID NO:52)

DIVLTQSPVSITASRGEKVTITC**RASSSISSNYL**HCYQQKPGSSPKLLIY**RTSILAS**GVLD
SFSGSGSESSYTLTISCMQDEVAATYYC**QQGSSSPLT**FGAGTKLELKR

FIGURE 4D

Cell line 32.75 VH DNA sequence (SEQ ID NO:65)

AGGTCAAACTGCAGGAGTCAGGGGCTGAGCTGGTGAGGCCTGGGGCTTCAGTGAAGCTGTC
CTGCAAGGCTTCTGGCTACACCTTCACCAGGAACTGGATAAACTGGGTGAAGCAGAGGCCT
GGACAAGGCCTTGAGTGGATCGGAAATATTTATCCTTCTGATAGTTATACTAACTACAATC
AAAAGTTCAAGGACAAGGCCACAGTGACTGTAGACAAATCCTCCAGCACAGCCTACATGCA
GCTCAGCAGCCCGACATCTGAGGACTCTGCGGTCTATTATTGTACAAGATTGAGGGGTTTA
TTACCTGACTACTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA

Cell line 32.75 VH Amino acid sequence (SEQ ID NO:66)

VKLQESGAELVRPGASVKLSCKAS**GYTFTRNWINW**VKQRPGQGLEWIG**NIYPSDSYTNYNQ**
KFKDKATVTVDKSSSTAYMQLSSPTSEDSAVYYCTR**LRGLLPDY**WGQGTTVTVSS

Cell line 32.75 VL DNA sequence (SEQ ID NO:67)

GACATCCAGATGACACAGTCTCCAAAATTCATGTCCACATCAGTAGGAGACAGGGTCAGCG
TCACCTGCAAGGCCAGTCAGAATGTGGATACTAATGTAGCCTGGTATCAACAGAAACCAGG
GCAATCTCCTAAAGCACTGATTTACTCGGCATCCTACCGGTACAGTGGAGTCCCTGATCGC
TTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAATGTGCAGTCTGAAG
ACTTGGCAGAGTATTTCTGTCAGCAATATAACAGCTATCCTCCTACGTTCGGTGCTGGGAC
CAAGCTGGAGCTGAAACGG

Cell line 32.75 VL Amino acid sequence (SEQ ID NO:68)

DIQMTQSPKFMSTSVGDRVSVTC**KASQNVDTNVA**WYQQKPGQSPKALIY**SASYRYS**GVPDR
FTGSGSGTDFTLTISNVQSEDLAEYFC**QQYNSYPPT**FGAGTKLELKR

FIGURE 4E

Cell line 32.2 VH-1 DNA sequence (SEQ ID NO:81)

AGGTGAAGCTGCAGGAGTCAGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCAAGATCTC
CTGCAAGGCTTCTGGGTATACCTTCACAAACTATGGAATGAACTGGGTGAAGCAGGCTCCA
GGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCTACACTGGAGAGCCAACATATGCTG
ATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACCTCTGCCAGCACTGCCTATTTGCA
GATCAACAACCTCAAAAATGAGGACACGGCTACATATTTCTGTGCAAGGGAAGGGTTGTAT
GGTAACTACTTTGACTACTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA

Cell line 32.2 VH-1 Amino acid sequence (SEQ ID NO:82)

VKLQESGPELKKPGETVKISCKAS**GYTFTNYGMNW**VKQAPGKGLKWMG**WINTYTGEPTYAD**
DFKGRFAFSLETSASTAYLQINNLKNEDTATYFCAR**EGLYGNYF**DYWGQGTTVTVSS

Cell line 32.2 VL DNA sequence (SEQ ID NO:83)

GACATCCAGATGACCCAGTCTCCAAAATTCATGTCCACATCAGTAGGAGACAGGGTCAGCG
TCACCTGCAAGGCCAGTCAGAATGTGGGTACTAATGTAGCCTGGTATCAACAGAAACCAGG
GCAATCTCCTAAAGCACTGATTTACTCGGCATCCTACCGGTACAGTGGAGTCCCTGATCGC
TTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAATGTGCAGTCTGAAG
ACTTGGCAGAGTATTTCTGTCAGCAATATAACAGCTATCCTCTCACGTTCGGTGCTGGGAC
CAAGCTGGAAATAAAACGG

Cell line 32.2 VL Amino acid sequence (SEQ ID NO:84)

DIQMTQSPKFMSTSVGDRVSVTC**KASQNVGTNVA**WYQQKPGQSPKALIY**SASYRYS**GVPDR
FTGSGSGTDFTLTISNVQSEDLAEYFC**QQYNSYPLT**FGAGTKLEIKR

FIGURE 5

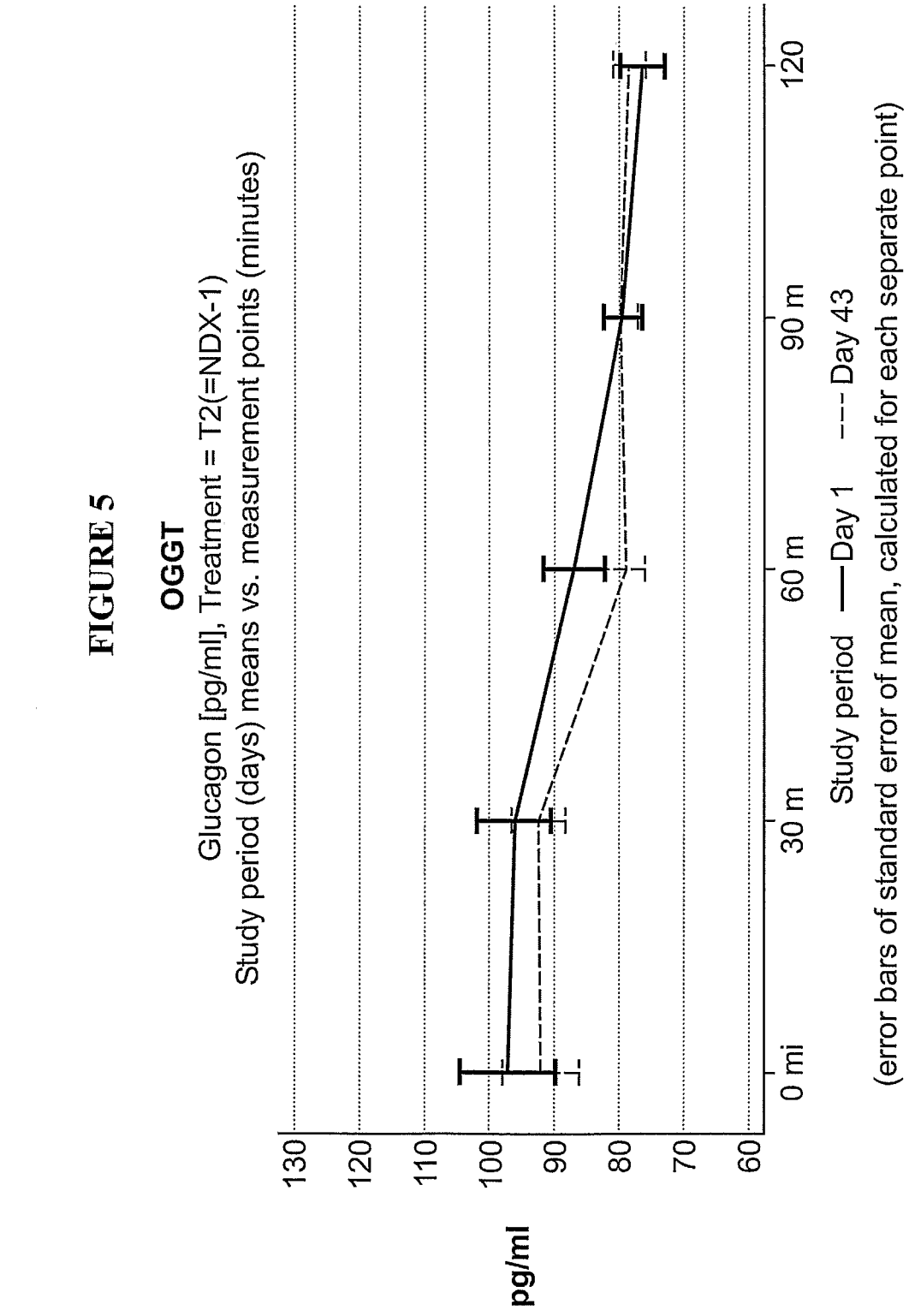

OGGT
Glucagon [pg/ml], Treatment = T2(=NDX-1)
Study period (days) means vs. measurement points (minutes)
pg/ml
130
120
110
100
90
80
70
60
0 mi
30 m
60 m
90 m
120
Study period —Day 1 --- Day 43
(error bars of standard error of mean, calculated for each separate point)

FIGURE 6

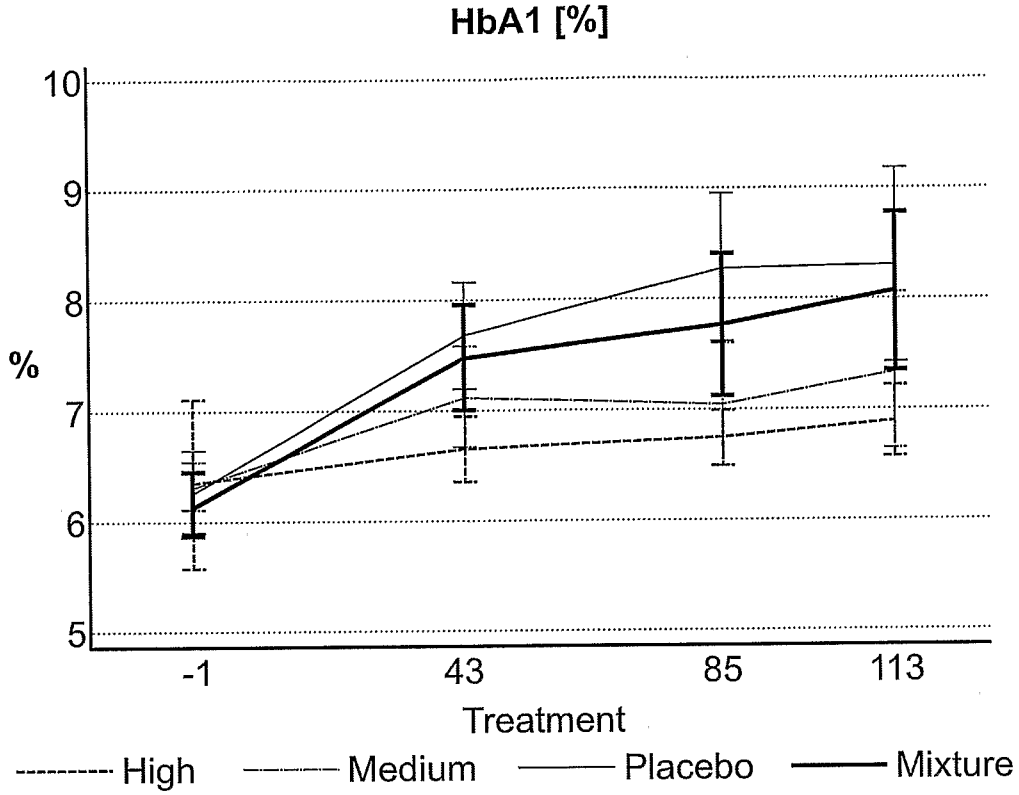


FIGURE 7

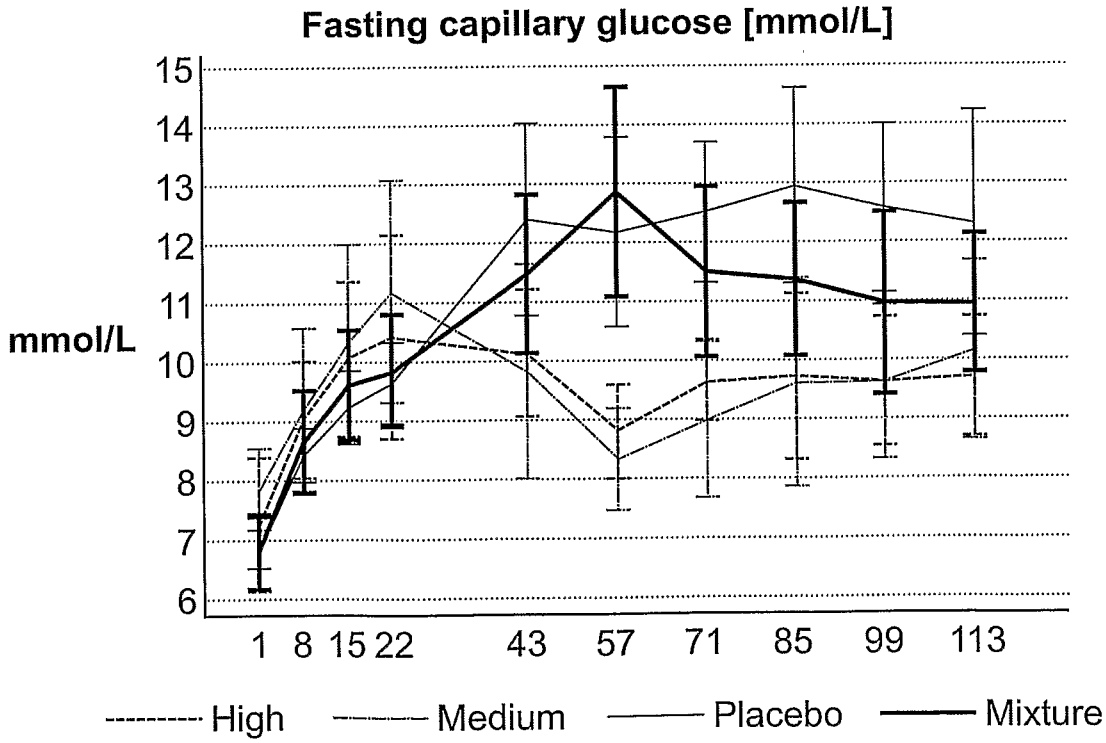


FIGURE 8

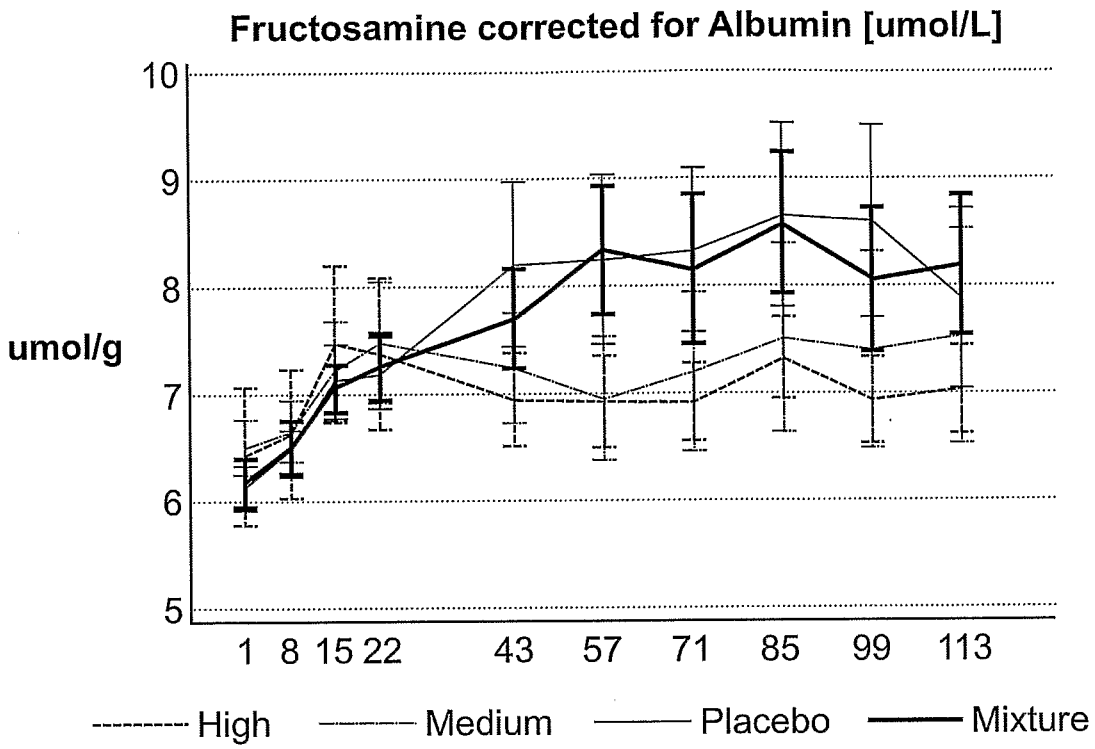


FIGURE 9

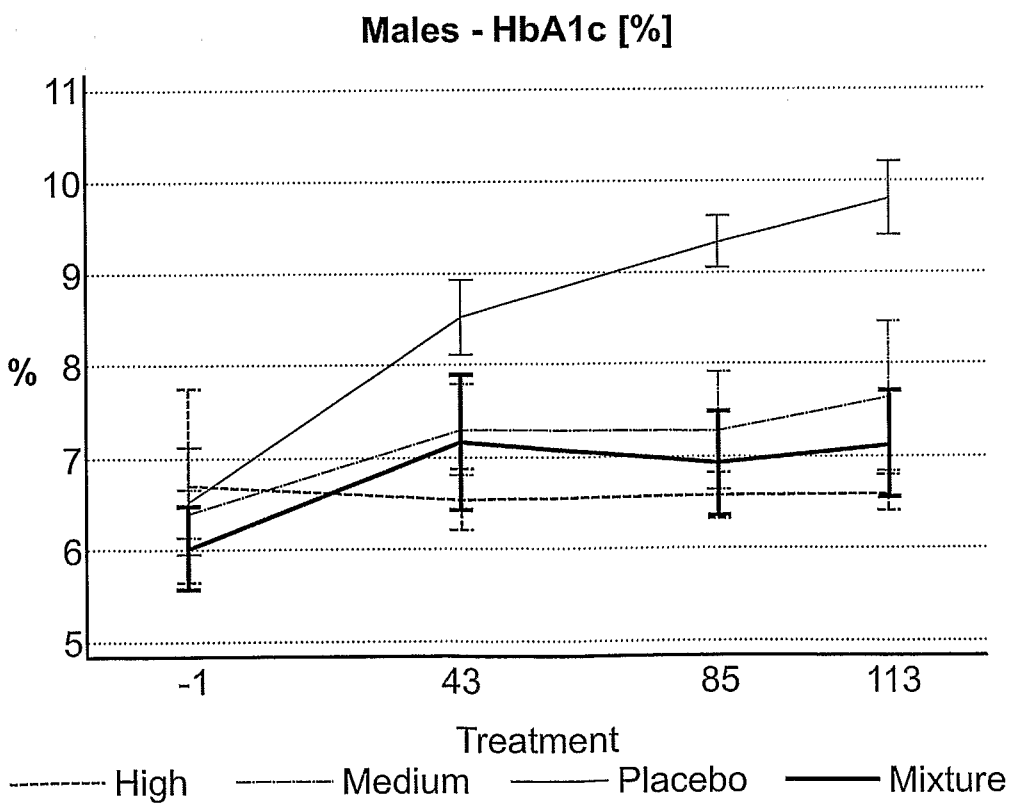


FIGURE 10

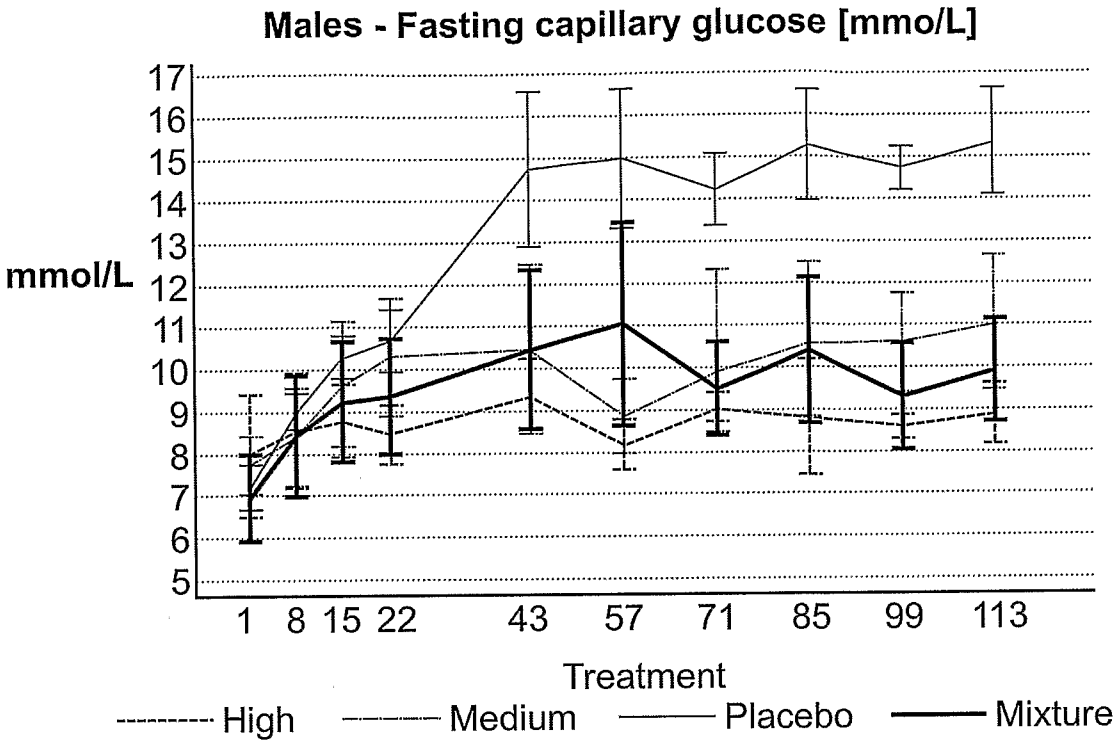


FIGURE 11

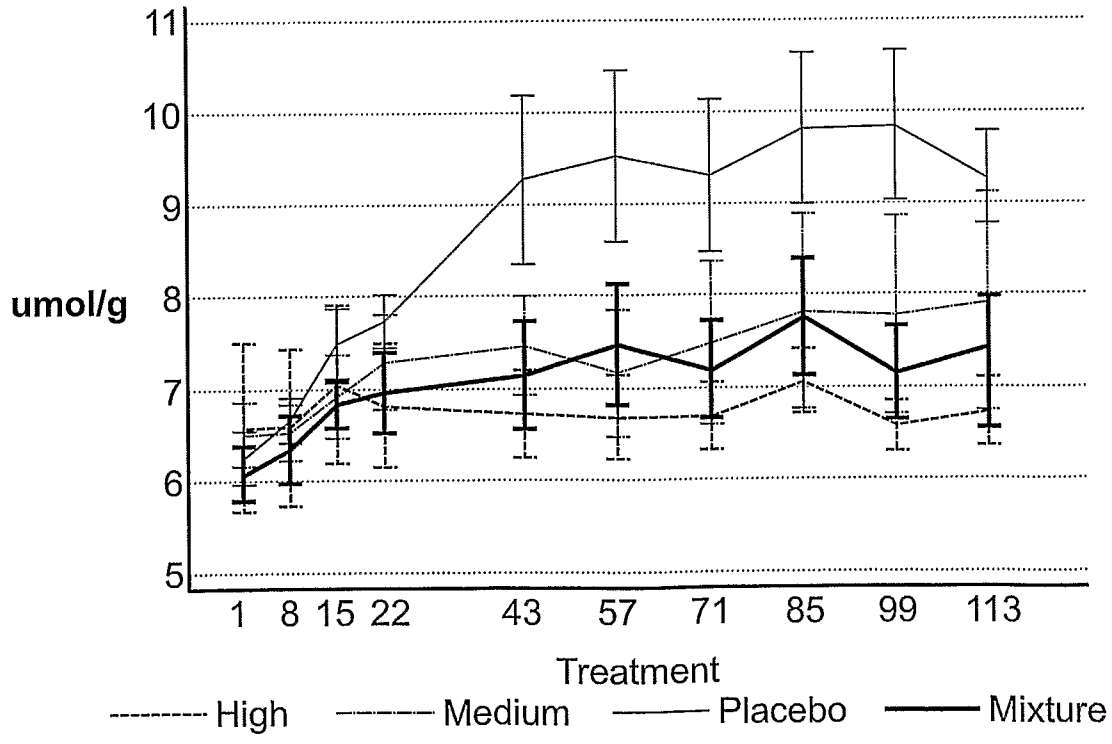


FIGURE 12A

	IgM CDR-H1	*Reactivity*
SEQ ID NO:6 (Example 1)	GYTFTRNWINW	-
SEQ ID NO:31 (Example 5)	GYTFTNYGMNW	-
SEQ ID NO:41 (Example 5)	GYTFTRNWINW	-
SEQ ID NO:51 (Example 5)	GYTFTRNWINW	-
SEQ ID NO:61 (Example 5)	GYTFTNYGMNW	-
SEQ ID NO:97 (A39276)	GYTFTNFWIGW	Anti-RF
SEQ ID NO:98 (AAL59371.1)	GYTFTYNAIQW	Anti-CL
SEQ ID NO:99 (AAB32203.1)	GYTFTSYWMQW	Anti-RNA
SEQ ID NO:100 (AAT76246.1)	GYTFTTYWMHW	Anti-sDNA
SEQ ID NO:101 (AAR90999.1)	GYTFTDYYMNW	Anti-NA
SEQ ID NO:102 (AAB46762.1)	GYTFTEYYVNW	Anti-VA
SEQ ID NO:103 (AAG33839.1)	GYTFTDYYIHW	Anti-RF
SEQ ID NO:104 (AAT76245.1)	GYTFTSYWMHW	Anti-sDNA
SEQ ID NO:105 (CAA84376.1)	GYTFTGYYIHW	Anti-RF
SEQ ID NO:106 (AAB46761.1)	GYTFTSYWMHW	Anti-VA
CONSERVED RESIDUES SEQ ID NO:162	GYTFT-----W	-

Consensus sequence

IgM CDR-H1 G-Y-T-F-T-x-x-x-x-x-W

General formula

IgM CDR-H1 G-Y-T-F-T-[RNYSTDEG]-[NYF]-[WGAY]-[IMV]-[NGQH]-W

Conserved and predominant residues

IgM CDR-H1 G-Y-T-F-T-[RNS]-Y-W-[IM]-N-W

	IgG CDR-H1	*Reactivity*
SEQ ID NO:21 (Example 5)	GYAFTSYNMFW	-
SEQ ID NO:99 (AAB32203.1)	GYTFTSYWMQW	Anti-RNA
SEQ ID NO:107 (AAB58061.1)	GYTFTDYNMHW	Anti-CD8
SEQ ID NO:108 (F30502)	GYSFTGYNMNW	Anti-RNA
SEQ ID NO:109 (AAR91003.1)	GYAFSSYWMNW	Anti-NA
SEQ ID NO:110 (AAT76236.1)	GYTFTSYVMHW	Anti-sDNA
SEQ ID NO:104 (AAT76245.1)	GYTFTSYWMHW	Anti-sDNA
SEQ ID NO:106 (AAB46761.1)	GYTFTSYWMHW	Anti-VA
CONSERVED RESIDUES SEQ ID NO:163	GY-F--Y-M-W	-

Consensus sequence

IgG CDR-H1 G-Y-x-F-x-x-Y-x-M-x-W

General formula

IgG CDR-H1 G-Y-[ATS]-F-[T/S]-[SDG]-Y-[NWV]-M-[FQHN]-W

Conserved and predominant residues

IgG CDR-H1 G-Y-T-F-T-S-Y-W-M-H-W

FIGURE 12B

	IgM CDR-H2	*Reactivity*
SEQ ID NO:8 (Example 1)	NIYPSDSYTNYNQKFKD	-
SEQ ID NO:32 (Example 5)	WINTYTGEPTYADDFKG	-
SEQ ID NO:42 (Example 5)	NIYPSDSYTNYNQKFKD	-
SEQ ID NO:52 (Example 5)	NIYPSDSYTNYNQKFKD	-
SEQ ID NO:62 (Example 5)	WINTYTGEPTYADDFKG	-
SEQ ID NO:111 (AAB32203.1)	EIDPSDSYTNYNQKFKG	Anti-RNA
SEQ ID NO:112 (AAT68292.1)	AIDTSDSYTYYNQKFKG	Anti-TG
SEQ ID NO:113 (A39276)	NIYPGGDYTNYIEKFKG	Anti-RF
SEQ ID NO:114 (AAB58061.1)	YIYPYTGGTGYNQKFKN	Anti-CD8
SEQ ID NO:115 (1921302A)	NINPYYGSTSYNQKFKG	Anti-CL
Conserved Residues SEQ ID NO:164	-I--------Y---FK-	-

Consensus sequence

IgM CDR-H2 x-I-x-x-x-x-x-x-x-x-Y-x-x-x-F-K-x

General formula

IgM CDR-H2 [NWEAY]-I-[YND]-[PT]-[SYG]-[DTGY]-[SGD]-[YEGS]-[TP]-[NTYGS]-Y-[NAI]-[QDE]-[KD]-F-K-[DGN]

Conserved and predominant residues

IgM CDR-H2 N-I-Y-P-S-D-S-Y-T-N-Y-N-Q-K-F-K-G

	IgG CDR-H2	*Reactivity*
SEQ ID NO:22 (Example 5)	YIDPYNGDTRYSQKFKG	-
SEQ ID NO:116 (AAR91004.1)	WIDPANGDTEYASKFQG	Anti-NA
SEQ ID NO:117 (F30502)	KINPYYGSTSYNQKFKG	Anti-RNA
SEQ ID NO:118 (AAT76236.1)	YINPYNDGTKYNEKFKG	Anti-sDNA
SEQ ID NO:119 (AAB46758.1)	WIDPENGDTEYAPKFQG	Anti-VA
SEQ ID NO:115 (1921302A)	NINPYYGSTSYNQKFKG	Anti-CL
SEQ ID NO:120 (AAE72083.1)	LINPFSGDTNYSQKFTG	Anti-3H1
SEQ ID NO:121 (B30502)	YINPYNDGTKYNEKFKG	Anti-RNA
SEQ ID NO:123 (AAR91007.1)	WIDPENGDTEYASKFQG	Anti-NA
Conserved Residues SEQ ID NO:165	-I-P----T-Y--KF-G	-

Consensus sequence

IgG CDR-H2 x-I-x-P-x-x-x-x-T-x-Y-x-x-K-F-x-G

General formula

IgG CDR-H2 [YWKNLR]-I-[DN]-P-[YAEFS]-[NYS]-[GD]-[DSG]-T-[RESKN]-Y-[SAN]-[QSEP]-K-F-[KQT]-G

Conserved and predominant residues

IgG CDR-H2 [YW]-I-N-P-Y-N-G-D-T-[ES]-Y-N-Q-K-F-K-G

FIGURE 12C

	IgM CDR-L1	*Reactivity*
SEQ ID NO:12 (Example 1)	KASQNVDTNVA	-
SEQ ID NO:34 (Example 5)	KASQNVGTNVA	-
SEQ ID NO:44 (Example 5)	RASSSISSNYL	-
SEQ ID NO:54 (Example 5)	KASQNVDTNVA	-
SEQ ID NO:64 (Example 5)	KASQNVGTNVA	-
SEQ ID NO:124 (AAS01840.1)	KASQNVGTNVA	Anti-NA
SEQ ID NO:125 (AAS01841.1)	KASQNVRTAVA	Anti-NA
SEQ ID NO:126 (AAT76271.1)	KASQDVSTAVA	Anti-sDNA
SEQ ID NO:127 (AAB46763.1)	KASQSVDYDGDSYMN	Anti-VA
SEQ ID NO:128 (AAA20447.1)	RASQSVSSYLA	Anti-RF
SEQ ID NO:129 (PC4282)	RASQSVSNYLA	Anti-RO
SEQ ID NO:130 (CAA56180.1)	RASQTVRKNYLA	Anti-TG
CONSERVED RESIDUES SEQ ID NO:166	-AS--------	-

Consensus sequence

IgM CDR-L1 x-A-S-x-x-x-x-x-x-x-x

General formula

IgM CDR-L1 [KR]-A-S-[QS]-[NSDT]-[VI]-[DGSR]-[TSYNK]-[NADY]-[VYGL]-[ALD]

Conserved and predominant residues

IgM CDR-L1 K-A-S-Q-N-V-S-T-N-V-A

	IgG CDR-L1	*Reactivity*
SEQ ID NO:24 (Example 5)	RASQDISNYLN	-
SEQ ID NO:131 (1921302B)	RASQSISNYLH	Anti-CL
SEQ ID NO:132 (AAL59380.1)	RASQSISSYLN	Anti-CL
SEQ ID NO:133 (AAL59377.1)	RASQSISSYLN	Anti-CL
SEQ ID NO:134 (CAA63587.1)	RASQGISNWLA	Anti-TG
SEQ ID NO:135 (AAG30434.1)	RASQGISSYLA	Anti-CL
SEQ ID NO:129 (PC4282)	RASQSVSNYLA	Anti-RO
SEQ ID NO:136 (CAA56181.1)	RASRGISNYLA	Anti-TG
SEQ ID NO:137 (AAE72082.1)	KASQDINGYLN	Anti-3H1
CONSERVED RESIDUES SEQ ID NO:167	-AS------L-	-

Consensus sequence

IgG CDR-L1 x-A-S-x-x-x-x-x-x-L-x

General formula

IgG CDR-L1 [RK]-A-S-[QR]-[DSG]-[IV]-[SN]-[NSG]-[YW]-L-[NHA]

Conserved and predominant residues

IgG CDR-L1 R-A-S-Q-S-I-S-N-Y-L-[NA]

FIGURE 12D

	IgM CDR-L2	*Reactivity*
SEQ ID NO:14 (Example 1)	SASYRYS	-
SEQ ID NO:35 (Example 5)	SASYRYS	-
SEQ ID NO:45 (Example 5)	RTSILAS	-
SEQ ID NO:55 (Example 5)	SASYRYS	-
SEQ ID NO:65 (Example 5)	SASYRYS	-
SEQ ID NO:138 (AAS01840.1)	SASYRYS	Anti-NA
SEQ ID NO:139 (G30502)	WASTRES	Anti-RNA
SEQ ID NO:140 (AAL59376.1)	WASTRES	Anti-CL
SEQ ID NO:141 (AAL59379.1)	WASTRES	Anti-CL
CONSERVED RESIDUES SEQ ID NO:168	--S---S	-

Consensus sequence

IgM CDR-L2 x-x-S-x-x-x-S

General formula

IgM CDR-L2 [SRW]-[AT]-S-[YIT]-[RL]-[YAE]-S

Conserved and predominant residues

IgM CDR-L2 S-A-S-Y-R-Y-S

	IgG CDR-L2	*Reactivity*
SEQ ID NO:25 (Example 5)	YTSRLHS	-
SEQ ID NO:142 (AAT76280.1)	LTSNLAS	Anti-sDNA
SEQ ID NO:143 (AAB46767.1)	DTSKLAS	Anti-VA
SEQ ID NO:144 (AAB46765.1)	DTSNLAS	Anti-VA
SEQ ID NO:145 (AAB46766.1)	YTSNLAP	Anti-VA
SEQ ID NO:146 (AAB46764.1)	YTSNLAP	Anti-VA
SEQ ID NO:147 (AAS01843.1)	TTSNLAS	Anti-NA
SEQ ID NO:148 (AAG30433.1)	KTSVLGS	Anti-CL
SEQ ID NO:149 (CAC22102.1)	TTSNLAS	Anti-TRKA
CONSERVED RESIDUES SEQ ID NO:169	-TS-L--	-

Consensus sequence

IgG CDR-L2 x-T-S-x-L-x-x

General formula

IgG CDR-L2 [YLDTK]-T-S-[RNKV]-L-[HAG]-[SP]

Conserved and predominant residues

IgG CDR-L2 Y-T-S-N-L-A-S

FIGURE 12E

	IgM CDR-L3	*Reactivity*
SEQ ID NO:16 (EXAMPLE 1)	QQYNSYPLT	-
SEQ ID NO:36 (EXAMPLE 5)	QQYNSYPLT	-
SEQ ID NO:46 (EXAMPLE 5)	QQGSSSPLT	-
SEQ ID NO:56 (EXAMPLE 5)	QQYNSYPPT	-
SEQ ID NO:66 (EXAMPLE 5)	QQYNSYPLT	-
SEQ ID NO:150 (AAS01840.1)	QQYNSYPYT	Anti-NA
SEQ ID NO:151 (AAB46766.1)	QQWSSDPLT	Anti-VA
SEQ ID NO:152 (PC4282)	QQRASWPLT	Anti-RO
SEQ ID NO:153 (S67940)	QQYGSSPYT	Anti-TG
SEQ ID NO:154 (CAA56180.1)	QQYGSSPIT	Anti-TG
CONSERVED RESIDUES SEQ ID NO:170	QQ--S-P-T	-

Consensus sequence

IgM CDR-L3 Q-Q-x-x-S-x-P-x-T

General formula

IgM CDR-L3 Q-Q-[YGWR]-[NSAG]-S-[YSDW]-P-[LPYI]-T

Conserved and predominant residues

IgM CDR-L3 Q-Q-Y-N-S-Y-P-L-T

	IgG CDR-L3	*Reactivity*
SEQ ID NO:26 (EXAMPLE 5)	QQGNTFPTF	-
SEQ ID NO:155 (AAB58062.1)	QQNNEDPYT	Anti-CD8
SEQ ID NO:156 (AAS01844.1)	QQSNEDPRT	Anti-NA
SEQ ID NO:157 (C30502)	QQTNSWPRT	Anti-RNA
SEQ ID NO:158 (AAB46763.1)	QQNNEDPFT	Anti-VA
SEQ ID NO:150 (AAS01840.1)	QQYNSYPYT	Anti-NA
CONSERVED RESIDUES SEQ ID NO:171	QQ-N--P--	-

Consensus sequence

IgG CDR-L3 Q-Q-x-N-x-x-P-x-x

General formula

IgG CDR-L3 Q-Q-[GNSTY]-N-[TES]-[FDWY]-P-[TYRF]-[FT]

Conserved and predominant residues

IgG CDR-L3 Q-Q-N-N-E-D-P-[YR]-T