

THE IMMUNOGLOBULIN *FactsBook*

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Protein display of the human IGH V-REGIONS

Only the *01 allele of each functional or ORF V-REGION is shown. IGHV genes are listed for each subgroup, according to their position from 3' to 5' in the locus.

IGHV gene	FR1-IMGT (1-26)		CDR1-IMGT (27-38)		FR2-IMGT (39-55)		CDR2-IMGT (56-65)		FR3-IMGT (66-104)		CDR3-IMGT (105-115)	
	1	10	20	30	40	50	60	70	80	90	100	110
X07448, IGHV1-2	QVQLVQSGA	EVKKPGASVKV	SCKAS	GYTFTGY	... MHWVRQAPGQGLEWMGR	INPNSGGT	NYAQKFQ	GRVTSTRDTS	SISTAYMELSLR	SDDTVVYYC	AR	.....
X62109, IGHV1-3	QVQLVQSGA	EVKKPGASVKV	SCKAS	GYTFTSYA	... MHWVRQATGQGLEWMGW	MNPNSGNT	GYAQKFQ	GRVTMTNRTS	SISTAYMELSSL	RSED	TAVYYC	AR
M99637, IGHV1-8	QVQLVQSGA	EVKKPGASVKV	SCKAS	GYTFTSYD	... ISWVRQAPGQGLEWMGW	ISAYNGNT	NYAQKLQ	GRVTMTTDT	STSTAYMELSLR	SDDTAVYYC	AR	.....
M99641, IGHV1-18	QVQLVQSGA	EVKKPGASVKV	SCKAS	GYTFTSYG	... ISWVRQAPGQGLEWMGW	ISAYNGNT	NYAQKLQ	GRVTMTTDT	STSTAYMELSLR	SDDTAVYYC	AR	.....
M99642, IGHV1-24	QVQLVQSGA	EVKKPGASVKV	SCKAS	GYTFTPELS	... MHWVRQAPGKGLEWMGG	FDPEDEGT	IYAKKFQ	GRVTMTEDT	STDTAYMELSSL	RSED	TAVYYC	AT
X92209, IGHV1-45	QVQLVQSGA	EVKKPGSSVKV	SCKAS	GYTFTYRY	... LHWVRQAPGQALEWMGG	ITPFNGNT	NYAQKFQ	DRVTITDRSM	STAYMELSSL	RSED	TAMYYC	AR
X92343, IGHV1-46	QVQLVQSGA	EVKKPGASVKV	SCKAS	GYTFTSY	... MHWVRQAPGQGLEWMGI	INPNSGGT	SYAQKFQ	GRVTMTTRD	TSSTVYMESSL	RSED	TAVYYC	AR
M29809, IGHV1-58	QMQLVQSGP	EVKKPGTSVKV	SCKAS	GFTFTSSA	... VQWVRQARGQRLIEWIG	IVVSGSGT	NYAQKFQ	ERVITITRDM	STSTAYMELSSL	RSED	TAVYYC	AA
L22582, IGHV1-69	QVQLVQSGA	EVKKPGSSVKV	SCKAS	GFTFTSSA	... ISWVRQAPGQGLEWMGG	IIPIFGTA	NYAQKFQ	GRVTITADE	STSTAYMELSSL	RSED	TAVYYC	AR
Z18904, IGHV1-c	.....	KSGASVKV	SCSFS	GFTITSYG	... IHWVQSPGQGLEWMGW	INPNSGGT	SYAQKFQ	GRFTMTTRD	MTSTTAYTDL	SSLTSED	MAVYYY	AR
Z12305, IGHV1-f	EVQLVQSGA	EVKKPGATVK	ISKVS	GYTFTDYY	... MHWVQAPGKGLEWMGL	VDPEDEGT	IYAEKFQ	GRVTITADT	STDTAYMELSSL	RSED	TAVYYC	AT
X62111, IGHV2-5	QITLKESGP	TLVKPTQTL	TLTCTFS	GFSLSTSGV	... VGWIRQPPGKALEWLAL	IYWNDDK	RYSPSLK	SRLTITKDT	SKNQVLTMTN	MNDPVD	TATYYC	AHR
M99648, IGHV2-26	QVTLKESGP	VLVKPTETL	TLTCTVS	GFSLSNARM	... VSWIRQPPGKALEWLAL	IFSNDEK	SYSTSLK	SRLTISKDT	SKSQVLTMTN	MNDPVD	TATYYC	ARI
L21969, IGHV2-70	QVTLRESGP	ALVKPTQTL	TLTCTFS	GFSLSTSGMC	... VSWIRQPPGKALEWLAL	IDWNDDK	YYSTSLK	TRLTISKDT	SKNQVLTMTN	MNDPVD	TATYYC	ARI
M99649, IGHV3-7	EVQLVESGG	GLVQPGGSLRL	SCAAS	GFTFTSSY	... MSWVRQAPGKGLEWVAN	IKQDGSSE	YVDSVK	GRFTISRDN	AKNSLYLQMN	SLRAED	TAVYYC	AR
M99651, IGHV3-9	EVQLVESGG	GLVQPGGSLRL	SCAAS	GFTFTDYA	... MHWVRQAPGKGLEWVSG	ISWNSGSI	GYADSVK	GRFTISRDN	AKNSLYLQMN	SLRAED	TALYYC	AKD
M99652, IGHV3-11	QVQLVESGG	GLVKPGGSLRL	SCAAS	GFTFTDYY	... MSWIRQAPGKGLEWVSY	ISSSGGTI	YVADSVK	GRFTISRDN	AKNSLYLQMN	SLRAED	TAVYYC	AR
X92217, IGHV3-13	EVQLVESGG	GLVQPGGSLRL	SCAAS	GFTFTSSYD	... MHWVRQATGKGLEWVSA	IGTAGDT	YYPGSVK	GRFTISRDN	AKNSLYLQMN	SLRAED	TAVYYC	AR
X92216, IGHV3-15	EVQLVESGG	GLVKPGGSLRL	SCAAS	GFTFTSNAM	... MSWVRQAPGKGLEWVGR	IKSKTDGGT	DYAAPVK	GRFTISRDD	SKNTLYLQMN	SLKTED	TAVYYC	TT
M99655, IGHV3-16	EVQLVESGG	GLVQPGGSLRL	SCAAS	GFTFTNSD	... MNWARKAPGKGLEWVSG	VSWNGSRT	HYVDSVK	RRFTISRDN	SKNSLYLQKN	RRRAED	MAVYYC	VR
M99657, IGHV3-20	EVQLVESGG	GVVPRGGSLRL	SCAAS	GFTFTDYG	... MSWVRQAPGKGLEWVSG	INWNGGST	GYADSVK	GRFTISRDN	AKNSLYLQMN	SLRAED	TALYHC	AR
X92216, IGHV3-21	EVQLVESGG	GLVKPGGSLRL	SCAAS	GFTFTSSY	... MHWVRQAPGKGLEWVSS	ISSSSYI	YVADSVK	GRFTISRDN	AKNSLYLQMN	SLRAED	TAVYYC	AR
M99660, IGHV3-23	EVQLLES	GGGLVQPGGSLRL	SCAAS	GFTFTSSYA	... MSWVRQAPGKGLEWVSA	ISGSGGST	YVADSVK	GRFTISRDN	SKNTLYLQMN	SLRAED	TAVYYC	AK
M83134, IGHV3-30	QVQLVESGG	GVVQPGGSLRL	SCAAS	GFTFTSSYA	... MHWVRQAPGKGLEWVAV	ISYDGSNK	YVADSVK	GRFTISRDN	SKNTLYLQMN	SLRAED	TAVYYC	AR
X92283, IGHV3-30-3	QVQLVESGG	GVVQPGGSLRL	SCAAS	GFTFTSSYA	... MHWVRQAPGKGLEWVAV	ISYDGSNK	YVADSVK	GRFTISRDN	SKNTLYLQMN	SLRAED	TAVYYC	AR
L06618, IGHV3-33	QVQLVESGG	GVVQPGGSLRL	SCAAS	GFTFTSSYG	... MHWVRQAPGKGLEWVAV	IWDGSGNT	YVADSVK	GRFTISRDN	SKNTLYLQMN	SLRAED	TAVYYC	AR
M99666, IGHV3-35	EVQLVESGG	GLVQPGGSLRL	SCAAS	GFTFTNSD	... MNWVHAPGKGLEWVSG	VSWNGSRT	HYADSVK	GRFTISRDN	SKNTLYLQTN	SLRAED	TAVYYC	VR
M99669, IGHV3-38	EVQLVESGG	GLVQPRGSLRL	SCAAS	GFTFTSSN	... MSWIRQAPGKGLEWVSS	ISGSGST	YVADSRK	GRFTISRDN	SKNTLYLQMN	SLRAED	TAAYYC	ARY
M99672, IGHV3-43	EVQLVESGG	VVVQPGGSLRL	SCAAS	GFTFTDYYT	... MHWVRQAPGKGLEWVSL	ISWDGGST	YVADSVK	GRFTISRDN	SKNSLYLQMN	SLRTE	TALYYC	AKD

Z18900, IGHV3-47	EDQLVESGG. GLVQPGGSLRPSCAAS	GFAFSSYA...	LHWVRRAPGKGLEWVSA	IGTGGDT...	YYADSVK. GRFTISRDNNAKSLYLHMNSLIAEDMAVYYC	AR.....
M99675, IGHV3-48	EVQLVESGG. GLVQPGGSLRLSCAAS	GFTFSSYS...	MNWVRQAPGKGLEWVS	ISSSSSTI...	YYADSVK. GRFTISRDNNAKSLYLQMNSLRAEDTAVYYC	AR.....
M99676, IGHV3-49	EVQLVESGG. GLVQPGSLRLSCTAS	GFTFGDYA...	MSWFRQAPGKGLEWVGF	IRSKAYGGTT	EYASVK. GRFTISRDKSKSIAYLQMNSLKTEDTAVYYC	TR.....
M99679, IGHV3-53	EVQLVESGG. GLIQQGSLRLSCAAS	GFTVSSNY...	MSWVRQAPGKGLEWVS	IYSGGST...	YYADSVK. GRFTISRDNKNTLYLQMNSLRAEDTAVYYC	AR.....
M99682, IGHV3-64	EVQLVESGG. GLVQPGGSLRLSCAAS	GFTFSSYA...	MHWVRQAPGKGLEYVSA	ISSNGGST...	YYANSVK. GRFTISRDNKNTLYLQMNSLRAEDMAVYYC	AR.....
X92218, IGHV3-66	EVQLVESGG. GLVQPGGSLRLSCAAS	GFTVSSNY...	MSWVRQAPGKGLEWVS	IYSGGST...	YYADSVK. GRFTISRDNKNTLYLQMNSLRAEDTAVYYC	AR.....
X92206, IGHV3-72	EVQLVESGG. GLVQPGGSLRLSCAAS	GFTFSDHY...	MDWVRQAPGKGLEWVGR	TRNKANSYTT	EYAASVK. GRFTISRDDSKNSLYLQMNSLKTEDTAVYYC	AR.....
Z27508, IGHV3-73	EVQLVESGG. GLVQPGGSLRLSCAAS	GFTFSGSA...	MHWVRQASGKGLEWVGR	IRSKANSYAT	AYAASVK. GRFTISRDDSKNTAYLQMNSLKTEDTAVYYC	TR.....
Z12353, IGHV3-74	EVQLVESGG. GLVQPGGSLRLSCAAS	GFTFSSYW...	MHWVRQAPGKGLEWVSR	INSDGSSST.	SYADSVK. GRFTISRDNKNTLYLQMNSLRAEDTAVYYC	AR.....
Z18898, IGHV3-d	EVQLVESRG. VLVQPGGSLRLSCAAS	GFTVSSNE...	MSWVRQAPGKGLEWVSS	ISGGGST...	YYADSRK. GRFTISRDNKNTLHLQMNSLRAEDTAVYYC	KK.....
X05713, IGHV4-4	QVQLQESGP. GLVKPPTLSLTCAVS	GGSISSSNW...	WSWVRQPPGKGLEWIGE	IYHSGST...	NYNPSLK. SRVTISVDKSKNQFSLKLSSVTAADTAVYYC	AR.....
X05714, IGHV4-28	QVQLQESGP. GLVKPSDTLSLTCAVS	GYSISSSNW...	WGWRQPPGKGLEWIGY	IYYSGST...	YYPNSLK. SRVTMSVDTSKNQFSLKLSSVTAADTAVYYC	AR.....
L10089, IGHV4-30-2	QLQLQESGS. GLVKPSQTLSTCAVS	GGSISSGGYS...	WSWVRQPPGKGLEWIGY	IYHSGST...	YYPNSLK. SRVTISVDKSKNQFSLKLSSVTAADTAVYYC	AR.....
Z14238, IGHV4-30-4	QVQLQESGP. GLVKPSQTLSTCTVS	GGSISSGDY...	WSWVRQPPGKGLEWIGY	IYYSGST...	YYPNSLK. SRVTISVDKSKNQFSLKLSSVTAADTAVYYC	AR.....
L10098, IGHV4-31	QVQLQESGP. GLVKPSQTLSTCTVS	GGSISSGGY...	WSWVRQPPGKGLEWIGY	IYYSGST...	YYPNSLK. SRVTISVDKSKNQFSLKLSSVTAADTAVYYC	AR.....
X92278, IGHV4-34	QVQLQWGA. GLLKPSSETLSLTCAVY	GGSFSGY...	WSWVRQPPGKGLEWIGE	INHSGST...	NYNPSLK. SRVTISVDKSKNQFSLKLSSVTAADTAVYYC	AR.....
L10094, IGHV4-39	QLQLQESGP. GLVKPSSETLSLTCTVS	GGSISSSY...	WGWRQPPGKGLEWIGS	IYYSGST...	YYPNSLK. SRVTISVDKSKNQFSLKLSSVTAADTAVYYC	AR.....
L10088, IGHV4-59	QVQLQESGP. GLVKPSSETLSLTCTVS	GGSISSY...	WSWVRQPPGKGLEWIGY	IYYSGST...	NYNPSLK. SRVTISVDKSKNQFSLKLSSVTAADTAVYYC	AR.....
M29811, IGHV4-61	QVQLQESGP. GLVKPSSETLSLTCTVS	GGSVSSGSY...	WSWVRQPPGKGLEWIGY	IYYSGST...	NYNPSLK. SRVTISVDKSKNQFSLKLSSVTAADTAVYYC	AR.....
Z12367, IGHV4-b	QVQLQESGP. GLVKPSSETLSLTCAVS	GYSISSGY...	WGWRQPPGKGLEWIGS	IYHSGST...	YYPNSLK. SRVTISVDKSKNQFSLKLSSVTAADTAVYYC	AR.....
M99686, IGHV5-51	EVQLVQSGA. EVKKPGESLKISKCKGS	GYSFTSYW...	IGWVRQMPGKGLEWMGI	IYPGSDST.	RYSPSFQ. GQVTISADKSIISTAYLQWSSSLKASDTAMYYC	AR.....
X92227, IGHV5-a	EVQLVQSGA. EVKKPGESLRISKCKGS	GYSFTSYW...	ISWVRQMPGKGLEWMGR	IDPDSYTT.	NYSPSFQ. GHVTISADKSIISTAYLQWSSSLKASDTAMYYC	AR.....
X92224, IGHV6-1	QVQLQQSGP. GLVKPSQTLSTCAIS	GDSVSSNSAA...	WNWIRQSPSGLEWLGR	TYRSKWYN.	DYAVSVK. SRITINPDTSKNQFSLQLNSVTPEDTAVYYC	AR.....
L10057, IGHV7-4-1	QVQLVQSGS. ELKKPGASVKVSKAS	GYTPTSya...	MNWVRQAPGQGLEWMGW	INTNTGNP.	TYAQGFT. GRFVFSLDTSVSTAYLQICSLKAEDTAVYYC	AR.....
Z27509, IGHV7-81	QVQLVQSGH. EVKQPGASVKVSKAS	GYSFTTYG...	MNWVRQAPGQGLEWMGW	FNTYTGNP.	TYAQGFT. GRFVFSMDTSASTAYLQISSLKAEDMAMYYC	AR.....

Protein display of the human IGK V-REGIONS

Only the *01 allele of each functional or ORF V-REGION is shown, except for IGKV2-29 for which the *02 allele is displayed, the IGKV2-29*01 allele being a pseudogene. IGKV genes are listed, for each subgroup, according to their position from 3' to 5' in the locus.

IGKV gene	FR1-IMGT (1-26)			CDR1-IMGT (27-38)	FR2-IMGT (39-55)		CDR2-IMGT (56-65)	FR3-IMGT (66-104)			CDR3-IMGT (105-115)				
	1	10	20	30	40	50	60	70	80	90	100	110			
Z00001, IGKV1-5	DIQMTQSPSTLSASVGD	RVITTCRAS	QGISW	.....	LAWYQQKPGKAPKLLIY	DAS	.....	SLESQV	SRFSGSG	..SGTEFTLT	TISSLP	QPD	FATYYC	QQYNSYS	
M64858, IGKV1-6	AIQMTQSPSSLSASVGD	RVITTCRAS	QGIRND	.....	LGWYQQKPGKAPKLLIY	AAS	.....	SLQSGVP	SRFSGSG	..SGTEFTLT	TISSLP	QPD	FATYYC	LQDYNYP	
Z00014, IGKV1-8	AIRMTQSPSSFSASTG	DRVITTCRAS	QGISSY	.....	LAWYQQKPGKAPKLLIY	AAS	.....	TLQSGVP	SRFSGSG	..SGTDFTLT	TISSCL	QSED	FATYYC	QQYYSYP	
Z00008, IGKV1D-8	VIQMTQSPSLLASVGT	DRVITTCRAS	QGISSY	.....	LAWYQQKPGKAPKLLIY	AAS	.....	TLQSGVP	SRFSGSG	..SGTDFTLT	TISSCL	QSED	FATYYC	QQYYSFP	
Z00013, IGKV1-9	DIQMTQSPSSLSASVGD	RVITTCRAS	QGISSY	.....	LAWYQQKPGKAPKLLIY	AAS	.....	TLQSGVP	SRFSGSG	..SGTEFTLT	TISSLP	QPD	FATYYC	QQLNSYP	
V01577, IGKV1-12	DIQMTQSPSSVSASVGD	RVITTCRAS	QGISSW	.....	LAWYQQKPGKAPKLLIY	AAS	.....	SLQSGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QQANSFP	
X17263, IGKV1D-12	DIQMTQSPSSVSASVGD	RVITTCRAS	QGISSW	.....	LAWYQQKPGKAPKLLIY	AAS	.....	SLQSGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QQANSFP	
X17262, IGKV1D-13	AIQLTQSPSSLSASVGD	RVITTCRAS	QGISSA	.....	LAWYQQKPGKAPKLLIY	DAS	.....	SLESQV	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QQFNYP	
J00248, IGKV1-16	DIQMTQSPSSLSASVGD	RVITTCRAS	QGISNY	.....	LAWYQQKPGKAPKSLIY	AAS	.....	SLQSGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QQYNSYP	
K01323, IGKV1D-16	DIQMTQSPSSLSASVGD	RVITTCRAS	QGISW	.....	LAWYQQKPEKAPKSLIY	AAS	.....	SLQSGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QQYNSYP	
X72808, IGKV1-17	DIQMTQSPSSLSASVGD	RVITTCRAS	QGIRND	.....	LGWYQQKPGKAPKLLIY	AAS	.....	SLQSGVP	SRFSGSG	..SGTEFTLT	TISSLP	QPD	FATYYC	LQHNSYP	
X63392, IGKV1D-17	NIQMTQSPSAMSASVGD	RVITTCRAS	QGISNY	.....	LAWYQQKPGKVPKHLIY	AAS	.....	SLQSGVP	SRFSGSG	..SGTEFTLT	TISSLP	QPD	FATYYC	LQHNSYP	
X63398, IGKV1-27	DIQMTQSPSSLSASVGD	RVITTCRAS	QGISNY	.....	LAWYQQKPGKVPKLLIY	DAS	.....	TLQSGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QKYNAP	
M64856, IGKV1-33	DIQMTQSPSSLSASVGD	RVITTCRAS	QDISNY	.....	LNWYQQKPGKAPKLLIY	DAS	.....	NLETGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QQYDNL	
M64855, IGKV1D-33	DIQMTQSPSSLSASVGD	RVITTCRAS	QDISNY	.....	LNWYQQKPGKAPKLLIY	DAS	.....	NLETGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QQYDNL	
X59316, IGKV1-37	DIQLTQSPSSLSASVGD	RVITTCRAS	QGISSY	.....	LNWYQQKPGKVPKLLIY	SAS	.....	NLQSGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QRTYNAP	
X71893, IGKV1D-37	DIQLTQSPSSLSASVGD	RVITTCRAS	QGISSY	.....	LNWYQQKPGKVPKLLIY	SAS	.....	NLQSGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QRTYNAP	
X59315, IGKV1-39	DIQMTQSPSSLSASVGD	RVITTCRAS	QTISSY	.....	LNWYQQKPGKAPKLLIY	AAS	.....	SLQSGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QQSYSTP	
X59312, IGKV1D-39	DIQMTQSPSSLSASVGD	RVITTCRAS	QTISSY	.....	LNWYQQKPGKAPKLLIY	AAS	.....	SLQSGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QQSYSTP	
X72816, IGKV1D-42	DIQMTQSPSFLSASVGD	RVITTCRAS	EGISSN	.....	LAWYLLQKPGKSPKFLIY	DAK	.....	DLHGV	SRFSGRG	..SGTDFTLT	TISSLP	QPD	FATYYC	KQDFSYP	
X72817, IGKV1D-43	AIRMTQSPSSFLSASVGD	RVITTCRAS	QGISSY	.....	LAWYQQKPAKAPKFLIY	YAS	.....	SLQSGVP	SRFSGSG	..SGTDFTLT	TISSLP	QPD	FATYYC	QQYYSTP	
X12684, IGKV2-24	DIVMTQTPLSSPVT	LGQPASISCRSS	QSLVHSDGNTY	.....	LSWLQQRPGQPRLLIY	KIS	.....	NRFSGVP	DRFSGSG	..AGTDFTLK	ISRVEA	EDVG	YVYC	MQATQFP	
X63401, IGKV2D-24	DIVMTQTPLSSPVT	LGQPASISFRSS	QSLVHSDGNTY	.....	LSWLQQRPGQPRLLIY	KVS	.....	NRFSGVP	DRFSGSG	..AGTDFTLK	ISRVEA	EDVG	YVYC	TQATQFP	
X63397, IGKV2-28	DIVMTQSPSLSLPVT	PGEPASISCRSS	QSLHNSGNY	.....	LDWYLQKPGQSPQLLIY	LGS	.....	NRASGVP	DRFSGSG	..SGTDFTLK	ISRVEA	EDVG	YVYC	MQALQTP	
X12691, IGKV2D-28	DIVMTQSPSLSLPVT	PGEPASISCRSS	QSLHNSGNY	.....	LDWYLQKPGQSPQLLIY	LGS	.....	NRASGVP	DRFSGSG	..SGTDFTLK	ISRVEA	EDVG	YVYC	MQALQTP	
U1645, IGKV2-29*02	DIVMTQTPLSLSLP	TPGPASISCKSS	QSLHSDGNTY	.....	LYWYLQKPGQSPQLLIY	EV	.....	SRFSGVP	DRFSGSG	..SGTDFTLK	ISRVEA	EDVG	YVYC	MQGTHLP	
M31952, IGKV2D-29	DIVMTQTPLSLSLP	TPGPASISCKSS	QSLHSDGNTY	.....	LYWYLQKPGQSPQLLIY	EV	.....	NRFSGVP	DRFSGSG	..SGTDFTLK	ISRVEA	EDVG	YVYC	MQGTHLP	
X63403, IGKV2-30	DIVMTQSPSLSLP	VLTPGPASISCRSS	QSLVSDGNTY		LNWFQQRPGQSPRLIY	KVS		NRD	SGVP	DRFSGSG	..SGTDFTLK	ISRVEA	EDVG	YVYC	MQGTHWP
X63402, IGKV2D-30	DIVMTQSPSLSLP	VLTPGPASISCRSS	QSLVSDGNTY		LNWFQQRPGQSPRLIY	KVS		NWD	SGVP	DRFSGSG	..SGTDFTLK	ISRVEA	EDVG	YVYC	MQGTHWP

IGKV gene	FR1-IMGT (1-26)			CDR1-IMGT (27-38)	FR2-IMGT (39-55)		CDR2-IMGT (56-65)	FR3-IMGT (66-104)			CDR3-IMGT (105-115)	
	1	10	20	30	40	50	60	70	80	90	100	110
												
X59314, IGKV2-40	DIVMTQTPLSLPVTGPGEPAISCRSS	QSLLDSDDGNTY	LDWYLQKPGQSPQLLIY	TLS.....	YRASGVP.DRFSGSG..	SGTDFTLTKISRVEAEDVGVIYC	MQRIEFP....					
X59311, IGKV2D-40	DIVMTQTPLSLPVTGPGEPAISCRSS	QSLLDSDDGNTY	LDWYLQKPGQSPQLLIY	TLS.....	YRASGVP.DRFSGSG..	SGTDFTLTKISRVEAEDVGVIYC	MQRIEFP....					
X02725, IGKV3-7	EIVMTQSPPTLSLSPGERVTLSCRAS	QSVSSSY.....	LWYQQKPGQAPRLLIY	GAS.....	TRATGIP.ARFSGSG..	SGTDFTLTISLQPEDFAVIYC	QDHNLP....					
X72820, IGKV3D-7	EIVMTQSPATLSLSPGERATLSCRAS	QSVSSSY.....	LSWYQQKPGQAPRLLIY	GAS.....	TRATGIP.ARFSGSG..	SGTDFTLTISLQPEDFAVIYC	QDYNLP....					
X01668, IGKV3-11	EIVLTQSPATLSLSPGERATLSCRAS	QSVSSY.....	LAWYQQKPGQAPRLLIY	DAS.....	NRATGIP.ARFSGSG..	SGTDFTLTISLQPEDFAVIYC	QQRSNWP....					
X17264, IGKV3D-11	EIVLTQSPATLSLSPGERATLSCRAS	QSVSSY.....	LAWYQQKPGQAPRLLIY	DAS.....	NRATGIP.ARFSGSG..	PGTDFTLTISLQPEDFAVIYC	QQRSNWH....					
M23090, IGKV3-15	EIVMTQSPATLSVSPGERATLSCRAS	QSVSSN.....	LAWYQQKPGQAPRLLIY	GAS.....	TRATGIP.ARFSGSG..	SGTEFTLTISLQSEDFAVIYC	QYNNWP....					
X72815, IGKV3D-15	EIVMTQSPATLSVSPGERATLSCRAS	QSVSSN.....	LAWYQQKPGQAPRLLIY	GAS.....	TRATGIP.ARFSGSG..	SGTEFTLTISLQSEDFAVIYC	QYNNWP....					
X12686, IGKV3-20	EIVLTQSPGTLSSLSPGERATLSCRAS	QSVSSSY.....	LAWYQQKPGQAPRLLIY	GAS.....	SRATGIP.DRFSGSG..	SGTDFTLTISRLEPEDFAVIYC	QYQGSSP....					
X12687, IGKV3D-20	EIVLTQSPATLSLSPGERATLSCGAS	QSVSSSY.....	LAWYQQKPGQAPRLLIY	DAS.....	SRATGIP.DRFSGSG..	SGTDFTLTISRLEPEDFAVIYC	QYQGSSP....					
Z00023, IGKV4-1	DIVMTQSPDSLAVSLGERATINCKSS	QSVLYSSNNKNY	LAWYQQKPGQPPKLLIY	WAS.....	TRESGVP.DRFSGSG..	SGTDFTLTISLQAEADVAVIYC	QYYSTP....					
X02485, IGKV5-2	ETTLTQSPAFMSATPGDKVNISCKAS	QDIDDD.....	MNHYQQKPGEAAIFIQ	EAT.....	TLVPGIP.PRFSGSG..	YGTDFTLTINNIESEDAAYYFC	LQHDNFP....					
X63399, IGKV6-21	EIVLTQSPDFQSVTPKEKVTITCRAS	QSIGSS.....	LHWYQQKPDQSPKLLIK	YAS.....	QSFGVVP.SRFSGSG..	SGTDFTLTINSLEAEDAATYYC	HQSSSLP....					
X12683, IGKV6D-21	EIVLTQSPDFQSVTPKEKVTITCRAS	QSIGSS.....	LHWYQQKPDQSPKLLIK	YAS.....	QSFGVVP.SRFSGSG..	SGTDFTLTINSLEAEDAATYYC	HQSSSLP....					
X12688, IGKV6D-41	DVMTQSPAFLSVTPGEKVTITCQAS	EGIGNY.....	LYWYQQKPDQAPKLLIK	YAS.....	QSIGVVP.SRFSGSG..	SGTDFTTITISLEAEDAATYYC	QQGNKHP....					

Protein display of the human IGL V-REGIONS

Only the *01 allele of each functional or ORF V-REGION is shown. IGLV genes are listed, for each subgroup, according to their position from 3' to 5' in the locus.

IGLV gene	FR1-IMGT (1-26)				CDR1-IMGT (27-38)				FR2-IMGT (39-55)				CDR2-IMGT (56-65)				FR3-IMGT (66-104)				CDR3-IMGT (105-115)			
	1	10	20		30	40	50		60	70	80	90	100		110									
																								
Z73653, IGLV1-36	QSVLTQPPS.VSEAPQRVTISCSGS	SSNIGNNA....	VNWYQQLPGKAPKLLIY	YDD.....	LLPSGVS.DRFGSGK..	SGTSASLAISGLQSEDEADYYC	AAWDDSLNG...																	
M94116, IGLV1-40	QSVLTQPPS.VSGAPQQRVTISCTGS	SSNIGAGYD...	VHWYQQLPGTAPKLLIY	GNS.....	NRPSGVP.DRFGSGK..	SGTSASLAITGLQAEDEADYYC	QSYDSSLSG...																	
M94118, IGLV1-41	QSVLTQPPS.VSAAPGQKVITISCSGS	SSDMGNYA....	VSWYQQLPGTAPKLLIY	ENN.....	KRPSGIP.DRFGSGK..	SGTSATLGITGLWPEDEADYYC	LAWDTSPRA...																	
Z73654, IGLV1-44	QSVLTQPPS.ASGTPGQRTVITISCSGS	SSNIGSNT....	VNWYQQLPGTAPKLLIY	SNN.....	QRPSGVP.DRFGSGK..	SGTSASLAISGLQSEDEADYYC	AAWDDSLNG...																	
Z73663, IGLV1-47	QSVLTQPPS.ASGTPGQRTVITISCSGS	SSNIGSNT....	VNWYQQLPGTAPKLLIY	RNN.....	QRPSGVP.DRFGSGK..	SGTSASLAISGLQSEDEADYYC	AAWDDSLSG...																	
M94112, IGLV1-50	QSVLTQPPS.VSGAPQQRVTISCTGS	SSNIGAGYV...	VHWYQQLPGTAPKLLIY	GNS.....	NRPSGVP.DQFGSGK..	SGTSASLAITGLQSEDEADYYC	KAWDNSLNA...																	
Z73661, IGLV1-51	QSVLTQPPS.VSAAPGQKVITISCSGS	SSNIGNNY....	VSWYQQLPGTAPKLLIY	DNN.....	KRPSGIP.DRFGSGK..	SGTSATLGITGLQTDGDEADYYC	GTWDDSLSA...																	
X97462, IGLV2-8	QSALTQPPS.ASGSPGQSVTISCTGT	SSDVGGYNY...	VSWYQHPGKAPKLMY	EVS.....	KRPSGVP.DRFGSGK..	SGNTASLTVSGLQAEDEADYYC	SSYAGSNNF...																	
Z73657, IGLV2-11	QSALTQPRS.VSGSPGQSVTISCTGT	SSDVGGYNY...	VSWYQHPGKAPKLMY	DVS.....	KRPSGVP.DRFGSGK..	SGNTASLTVSGLQAEDEADYYC	CSYAGSYTF...																	
Z73664, IGLV2-14	QSALTQPAS.VSGSPGQSVTISCTGT	SSDVGGYNY...	VSWYQHPGKAPKLMY	EVS.....	NRPSGVS.NRPSGSK..	SGNTASLTVSGLQAEDEADYYC	SSYTSSSTL...																	
Z73642, IGLV2-18	QSALTQPPS.VSGSPGQSVTISCTGT	SSDVGSYNR...	VSWYQPPGTAPKLMY	EVS.....	NRPSGVP.DRFGSGK..	SGNTASLTVSGLQAEDEADYYC	SLYTSSSTF...																	
X14616, IGLV2-23	QSALTQPAS.VSGSPGQSVTISCTGT	SSDVGSYNL...	VSWYQHPGKAPKLMY	EGS.....	KRPSGVS.NRPSGSK..	SGNTASLTVSGLQAEDEADYYC	CSVAGSSTL...																	
Z73643, IGLV2-33	QSALTQPPF.VSGAPGQSVTISCTGT	SSDVGDYDH...	VFWYQKRLSTTSRLIY	NVN.....	TRPSGIS.DLFGSGK..	SGNMASTLTVSGLQSEVEANYHC	SLYSSSYTF...																	
X57826, IGLV3-1	SYELTQPPS.VSVSPGQTASITCSGD	KLGDYK....	ACWYQKPKGQAPVLVIY	QDS.....	KRPSGIP.ERFSGSN..	SGNTATLTVSGLQAMDEADYYC	QAWDSSSTA...																	
X97473, IGLV3-9	SYELTQPLS.VSVALGQTARITCGGN	NIGSKN....	VHWYQKPKGQAPVLVIY	RDS.....	NRPSGIP.ERFSGSN..	SGNTATLTVSRAQAGDEADYYC	QVWDSSSTA...																	
X97464, IGLV3-10	SYELTQPPS.VSVSPGQTARITCSGD	ALPKKY....	AYWYQKSGQAPVLVIY	EDS.....	KRPSGIP.ERFSGSS..	SGTMTATLTVSQAQVEDEADYYC	YSTDSSGNH...																	
Z73658, IGLV3-12	SYELTQPHS.VSVATAQMARITCGGN	NIGSKA....	VHWYQKPKGQAPVLVIY	SDS.....	NRPSGIP.ERFSGSN..	PGNTTTLTVSRIEAGDEADYYC	QVWDSSSDH...																	
X97471, IGLV3-16	SYELTQPPS.VSVSLQMARITCSGE	ALPKKY....	AYWYQKPKGQAPVLVIY	KDS.....	ERPSGIP.ERFSGSS..	SGTIVTLTVSQAQVEDEADYYC	LSADSSGTY...																	
X56178, IGLV3-19	SSELTQDPA.VSVALGQTVRITCQGD	SLRSYY....	ASWYQKPKGQAPVLVIY	GKN.....	NRPSGIP.DRFGSSS..	SGNTASLTVSQAQVEDEADYYC	NSRDSSGNH...																	
X71966, IGLV3-21	SVVLTQPPS.VSVAPGKTARITCGGN	NIGSKS....	VHWYQKPKGQAPVLVIY	YDS.....	DRPSGIP.ERFSGSN..	SGNTATLTVSRIEAGDEADYYC	QVWDSSSDH...																	
Z73666, IGLV3-22	SYELTQPLS.VSVSPGQTARITCSGD	VILGENY....	ADWYQKPKGQAPVLVIY	EDS.....	ERYPGIP.ERFSGST..	SGNTTTLTVSRIEAGDEADYYC	LSGDEDN....																	
X97474, IGLV3-25	SYELMQPPS.VSVSPGQTARITCSGD	ALPKQY....	AYWYQKPKGQAPVLVIY	KDS.....	ERPSGIP.ERFSGSS..	SGTIVTLTVSQAQVEDEADYYC	QSDASSGTY...																	
D86994, IGLV3-27	SYELTQPPS.VSVSPGQTARITCSGD	VLAKKY....	ARWFQKPKGQAPVLVIY	KDS.....	ERPSGIP.ERFSGSS..	SGTIVTLTVSQAQVEDEADYYC	YSAADNN....																	
Z73645, IGLV3-32	SSGPTQVPA.VSVALGQMARITCQGD	SMEGSY....	EHWYQKPKGQAPVLVIY	DSS.....	DRPSRIP.ERFSGSK..	SGNTTTLTVSQAQVEDEADYYC	QLIDNHA....																	

IGLV gene	FR1-IMGT (1-26)			CDR1-IMGT (27-38)			FR2-IMGT (39-55)			CDR2-IMGT (56-65)			FR3-IMGT (66-104)			CDR3-IMGT (105-115)		
	1	10	20	30	40	50	60	70	80	90	100	110						
																		
X57828, IGLV4-3	LPVLTQPPS	ASALLGASIKLTCTLS	SEHSTYT	....	IEWYQQRPGRSPOYIMK	VKSDGSH	...	SKGDGIP	DRFMGSS	..SGADRYLTFSNLQSDDEAEYHC	GESHTIDGQVG*							
Z73667, IGLV4-60	QPVLTSQSS	ASASLGSSVKLTCTLS	SGHSSYI	....	IAWHQQPGKAPRYLMK	LEGSGSY	...	NKSGGVP	DRFSGSS	..SGADRYLTISNLQLEDEADYYC	ETWDSNT	....						
Z73648, IGLV4-69	QLVLTQSPS	ASASLGASVKLTCTLS	SGHSSYA	....	IAWHQQPEKGPRYLMK	LNSDGS	...	SKGDGIP	DRFSGSS	..SGAERYLTISLQSEDEADYYC	QTWGTGI	....						
Z73672, IGLV5-37	QPVLTSQPS	SSASPGESARLTCTLP	SDINVGSYN	...	IYWYQKPGSPPRYLLY	YYSDSDK	...	QQSGGVP	SRFSGSKDASANTGILLISGLQSEDEADYYC	MIWPSNAS	....							
Z73668, IGLV5-39	QPVLTSPTS	LSASPGASARPTCTLR	SGINVGTYR	...	IYWYQKPGSLPRYLLR	YKSDSDK	...	QQSGGVP	SRFSGSKDASTNAGLLISGLQSEDEADYYC	AIWYSSTS	....							
Z73670, IGLV5-45	QAVLTQPAS	LSASPGASASLTCTLR	SGINVGTYR	...	IYWYQKPGSPPPQYLLR	YKSDSDK	...	QQSGGVP	SRFSGSKDASANAGILLISGLQSEDEADYYC	MIWHSSAS	....							
Z73649, IGLV5-48	QPVLTSPTS	LSASPGASARLTCTLR	SGINLGSYR	...	IFWYQKPESPPRYLLS	YYSDSSK	...	HQSGGVP	SRFSGSKDASSNAGILVISGLQSEDEADYYC	MIWHSSAS	...							
Z73669, IGLV5-52	QPVLTSQSS	HSASSGASVRLTCMLS	SGFSVGDWF	...	IRWYQKPGNPFRYLLY	YHSDSNK	...	QQSGGVP	SRFSGSNDASANAGILRISGLQPEDEADYYC	GTWHSNSKT	...							
Z73673, IGLV6-57	NFMLTQPHS	VSESPGKTVTISCTRS	SGSIASNY	....	VQWYQQRPGSSPTTVIY	EDN	.....	QRPSGVP	DRFSGSIDSSNSASLTISGLKTEDEADYYC	QSYDSSN	.....							
X14614, IGLV7-43	QTVVTQEPS	LTVSPGGTVTLTCASS	TGAVTSGY	...	PNWFQKPGQAPRALIY	STS	.....	NKHSWTP	ARFSGSL	..LGGKAALTLSGVQPEDEAEYHC	LLYYGGAQ	....						
Z73674, IGLV7-46	QAVVTQEPS	LTVSPGGTVTLTCGSS	TGAVTSGHY	...	PYWFQKPGQAPRTLII	DTS	.....	NKHSWTP	ARFSGSL	..LGGKAALTLGAQPEDEAEYHC	LLSYSGAR	....						
Z73650, IGLV8-61	QTVVTQEPS	FVSPGGTVTLTCGLS	SGSVSTSY	...	PSWYQQTGQAPRTLII	STN	.....	TRSSGVP	DRFSGSI	..LGNKAALTTITGAQADDESDDYC	VLYMGSGI	....						
Z73675, IGLV9-49	QPVLTSQPS	ASASLGASVTLTCTLS	SGYSNYK	....	VDWYQQRPGKPRFVMR	VGTGGIVG	...	SKGDGIP	DRFSVLG	..SGLNRYLTIKNIQEEDSDYHC	GADHGSGSNFV*							
Z73676, IGLV10-54	QAGLTQPPS	VSKGLRQTATLTCTGN	SNNVGNQG	....	AAWLQHQGHPPKLLSY	RNN	.....	NRPSGIS	ERLSASR	..SGNTASLTITGLQPEDEADYYC	SAWSDSLSA	...						
D86996, IGLV11-55	RPVLTQPPS	LSASPGATARLPCTLS	SDLVGGGN	...	MFWYQKPGSSPRFLY	HYSDSDK	...	QLGPGVP	SRVSGSKETSNTAFLILISGLQPEDEADYYC	QVYESSAN	....							