

Porcine V_k genes

IGK V ²	FRAMEWORK 1	CDR1	FRAMEWORK2	CDR2	FRAMEWORK 3	CDR3 ³	T ⁴	BM ⁴	S ⁴	ACCESSION # ^{5,6}
V1	AIQMTQSPASLAASLGDTSITCRAS	QSISSY· · · · ·	LAWYQQPGKAPKLLIY	AASSLQS· · ·	GVPSRFKSGSGTDFTLTISGLQAEDVATYYC	QQHNSA▲				
V1-1	-----	-----	-----	-----	-----	-----		1		AY518084
V1-1	-----	-----	-----R-----*	-----	-----	-----▲		1		AY518093
V1-2	-----	---NNW· · · ·	*-----	Y--T-----	-----	---D--▲			1	AY518123
V1-2	---L-----*--*	---NKW· · · ·	*-----A-----*	S--T-----	---*-----*-----	---H--▲	1			AY518151
V2 (A)	AIVLTQTPLSLSVSPGEPASISCRSS	QSLEIYGSNL·	LSWYQQKPGQSPRLLIY	FATNKAS· · ·	GVPDRFSGSGSGTDFTLKISRVEAEDAGVYYC	QQHKESP				
V2-1	-----S*	---SETY-F·	-----	-----	-----A-----**	---N---L			1	AY518130
V2-1	-----	---S-SY-·	-----	-----	-----**	---N---L		1		AY518081
V2-1	-----S	---S-SY-F·	-----	-----	-----**	---N---L		1		AY518102
V2-1	-----	-----N-F·	-----	-----	-----*-----**	---N---▲	1			AY518156
V2-2	-----S--A-----	---G---K·	-----L	---E-----	*-----*-----*	---D--			1	AY518116
V2-2	-----S--A-----	---K--	-----L	---E-----	*-----*-----*	---D--			2	SET 1 ⁶
V2-2	-----S--A-----	---K--	-----L	---E-----	*-----*D-----*	---D--			1	AY518134
V2-2	-----S--A-KG-----	---K--	-----L	---E-----	*-----*D-----*	---D--			1	AY518135
V2-3	-----	-----N-F·	-----*--*--Q--	E-*--R-----	*-----*-----*-----*	---N---L		1		AY518092
V2-3	-----	---K---D·	-----*--Q--	E-*--R-----	-----	---N---L	1			AY518152
V2-4	-----P-----	---A-----	-----*--Q--	EAA-R-----	-----	L---▲			3	SET 2
V2 (B)	AIVLTQTPLSLSVSPGEPASISCRSS	QSLLHTDGKNY	LNWYLQKPGQSPQLLIY	YATNRDT· · ·	GVPDRFTGSGSGTDFTLKISRVEAEDVGVYYC	FQALQSP				
V2-5	-----	-----	-----	-----	-----	-----	2	8	3	SET 3
V2-5	-----	-----	-----	-----	-----*	-----*	1	3	1	SET 4
V2-5	-----	---F-----	-----	-----	-----	-----	1			AY518165
V2-5	-----	-----G-----	-----	-----	-----	-----			1	AY518118
V2-5	-----	-----	-----	-----	---G-----	-----*	1			AY518160
V2-5	-----	-----	-----	-----	-----	---H-▲	1			AY518147
V2-5	-----	-----	-----H-----	-----	-----	-R-----	1			AY518148
V2-5	-----	-----	-----H-----	-----	-----	-----	1			AY518142
V2-5	-----P-----	-----	-----	-----	-----	-----*			1	AY518110
V2-5	*-----	-----	-----	-----	-----	---▲			1	AY518111
V2-5	-----*	---R-----	-----	-----	-----	---▲	1			AY518144
V2-5	-----	-N-----	-----R-----	-----	---Y-----	-----	1			AY518145
V2-5	-----	-----	-----	---N· · ·	-----R-----	-R*---▲	1			AY518146
V2-5	-----A-----	-----	-----S-----	-T-----	-----	---*-----	1			AY518161
V2-5	-----G-----R	K-----	-K-----	-----	-----	---Y-H*▲	2			AY518149
V2-6	-----	-----C-----	-----	R-----	-----G-----	---Y-H*▲	2			SET 5
V2-7	-----	-----	-----	---A· · ·	-----A*---*	Q-FK--▲		2		SET 6
V2-8	-----*	-----	---W*-----R*--	Q-----	-----*--*Y-----T-----G*-----	L-SKE--			1	AY518132
V2 (C)	AIVLTQSPLSLSVSPGEPASISCRSS	QSLLHSDGASL	LYWYQQKPGQSPRLLIY	YATNRAT· · ·	GVPDRFTGSGSGTDFTLKISRVEAEDVGVYYC	QQIIHSP				
V2-9	-----	-----	-----	-----	-----	-----	5	4	1	SET 7
V2-9	-----	-----	-----	-----	-----	-----*		1	1	SET 8
V2-9	-----	-----	-----	-----	-----R-----	-----	1			AY518143
V2-9	-----	-----	-----	-----	-----	---Q		1		AY518108
V2-9	-----	-----	-----	-----	-----D-----	---▲		2		SET 9
V2-9	-----	-----	-----	-----	-----	-----		1		AY518082
V2-9	-----*	-----	-----	-----	-----G-----	-----		1		AY518088
V2-9	-----	-----	-----	-----	-----	---LL		1		AY518103
V2-9	-----	-----	-----	-----	-----	---Q*--			9	SET 10
V2-9	-----	-----	-----	-----	-----	---F▲		1		AY518109
V2-9	*--*--T-----	-----	-----	-----	-----	---▲		1		AY518087
V2-9	---*-----	-----	-----*	-----	-----*	F-ALQ-E	1			AY518168
V2-9	-----	-----ET-Q	MW-----	-----	-----	-----			1	AY518137
V2-9	---*-----	-----	-----*	-----	-----*	F-ALQ-P	1			AY518141
V2-10	---*--T-----*--*	---VD---D*	-H--L-----*--F-	F-----S· ·	---*--S--*-----*-----A*-----	---KKE-▲	1			AY518167
V2-10	---*--T-----*--*	---VD---D*	-H--L-----*--F-	F-----S· ·	---*--S--*-----*-----A*-----	---NKE-*	2			SET 11

1. Asterisks in sequences denote silent nucleotide changes. Leader sequences L1 and L2 are not shown in the table in interest of space. L1 is used with IGKV1 and L2 with IGKV2. The sequences are: L1 = MRAPMHLGLLLLWLPGARC L2 = MRFPAQLLGLLLLWVPGSSG.
2. The first sequence in each of the four groups is the consensus for the family or subfamily. V1 = IGKV1; V2 = IGKV2 Decisions regarding the naming of putative individual genes, e.g. V2-5, are discussed in the text.
3. ▲ codon deletion during CDR3 formation.
4. Expression in thymus (T), bone marrow (BM), and spleen (S) respectively.
5. GenBank accession number.
6. Set refers to a group of clones with identical V_K sequences. These are not identical clones since they differ in CDR3 and J_K sequence. The number of times recovered and the tissue origin are also indicated.

Set 1 = AY518113, AY518128

Set 2 = AY518120, AY518125, AY518140

Set 3 = AY518085, AY518086, AY518091, AY518096, AY518098, AY518104, AY518105, AY518107, AY518158, AY518159, AY518117, AY518121, AY518126B

Set 4 = AY518090, AY518095, AY518112, AY518163, AY518124

Set 5 = AY518153, AY518155

Set 6 = AY518089, AY518097

Set 7 = AY518094, AY518099, AY518100, AY518106, AY518154, AY518150, AY518169, AY518136, AY518164, AY518166

Set 8 = AY518101, AY518139

Set 9 = AY518083, AY518170

Set 10 = AY518114, AY518115, AY518119, AY518127, AY518122, AY518129, AY518131, AY518133, AY518138

Set 11 = AY518157, AY518162