Table S2: KoRV variable sites in modern and historic koalas

	20	70	93	111	136	145	147	157	312	357	470	477	492	495	602	604	783	804	806	827
Position	20	70	93	111	136	145	147	157	312	357	470	477	492	495	602	604	783	804	806	827
AF151794	A	G	G	G	G	G	G	G	C	T	A	A	T	G	G	C	T	T	C	G
AB721500	A	G	G	G	G	A	A	G	T	C	A	A	T	G	G	C	C	T	T	G
Vienna Zoo	A	G	G/A	G	G	G/A	G/A	G/A	T	C	A	A/T	C/T	G/A	G	G	C	C/T	C/T	T	G/A
QMJ6480	A	G	G/A	G/A	G	G/A	G/A	G/A	T	C	A	A/T	T	G	G	C	C/T	C/T	T	G/A
521198	A	G	G/A	G	G	G/A	G/A	G	G	T	C/T	A	A/T	T	G	G	C	C/T	T	C/T	G/A
MCZ12454	A	G	G/A	G	G/A	G/A	G/A	G	T	C/T	A	A/T/G	C/T	G	C/G	C	C/T	T	T	G/A
MCZ8574	A	G	G/A	G	G/A	G/A	G/A	G	T	C	G/A	A/T	T	G	G	C	C/T	T	T/A	G/A
um3435	A	G	G/A	G	G	G/A	G/A	G	T	C/T	A	A/T	T	G	G	C	C/T	T	T	G/A
maex1738	G/A	G/A	G/A	G	G	G/A	G/A	G	T	C	A	A/T	T	G	C/G	C/T	T	C/T	T	G/A
Amino Acid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	866	874	900	909	910	916	964	991	1002	1065	1067	1108	1113	1197	1263	1301	1325	1404	1689	1809
Position	866	874	900	909	910	916	964	991	1002	1065	1067	1108	1113	1197	1263	1301	1325	1404	1689	1809
AF151794	G	A	T	C	C	A	C	C	T	G	G	A	G	G	C	G	C	G	T	A
AB721500	G	A	T	C	C	A	A	C	T	G	G	A	G	G	C	G	C	G	C	G
Vienna Zoo	G	A	A/T	C/T	C/T	A	A/C	C	T	G	G	A/G	G	G/A	C/T	G	C	G/A	T/C	A/G
QMJ6480	G	A	T	C/T/G	C/T/G	A	A/C	C	T	G	G	A/G	G/A	G	C	G/A	C	G	T/C	A/G
521198	G	A	T	C/T	C/T	A	A/C	C	T	G	G	A/G	G	G/A	C/T	G	C	G/A	T/C	A/G
MCZ12454	G	A	T	C/T	C/T	A	A/C	C	T/C	G	G	A/G	G	G	C/T	G	C	G/A	T/C	A/G
MCZ8574	G	A	T	C/T	C/T	A/T	C	C	T	G/A	G	A/G	G	G	C	G	C	G/A	T/C	A/G
um3435	G/T	G/A	T	C/T	C/T	A	A/C	C/T	G	G	G	A/G	G	G	C	G	C	G	T/C	A/G
maex1738	G	A	T	C/T	C/T	A/T	A/C	C	T	G	G/A	A/G	G	G	C	G	C/G	G	T/C	A/G
Amino Acid	-	-	-	-	-	-	-	-	-	-	-	E/K	V	P	P	G/E	P/R	T	L	K

	1993	2019	2130	2133	2154	2166	2229	2230	2240	2244	2245	2248	2254	2261	2263	2276	2360	2412	2665	2704
Position	1993	2019	2130	2133	2154	2166	2229	2230	2240	2244	2245	2248	2254	2261	2263	2276	2360	2412	2665	2704
AF151794	G	A	G	G	G	G	T	A	C	G	G	G	C	G	G	C	T	G	T	G
AB721500	G	C	A	G	G	A	T	A	C	G	G	G	C	G	G	C	C	G	C	G
Vienna Zoo	G	A/C	A	G/A	G	G/A	T	A	C	G	G	G	C	G	G	C	G	C/T	C/T	G/A
QMJ6480	G	A/C	A	G	G	G/A	T	A	C/G	G	G	G	C	G	G	C/T	C	C	G/A
521198	G	A/C	A	G	G	G/A	T	A	C/G	G/A	G	G	A/C	G	G	C	C	G	C	G
MCZ12454	G/A	A/C	G/A	G	G/A	G/A	T	A	A/G	C/G/A	G	G/A	G/A	A/C	G	G/A	C	C	G	C
MCZ8574	G	A/C	A	G	G	G/A	T	A/G	C/G/A	G	G	G	A/C	G	G	C	C/A	G	C/A	G
um3435	G	A/C	G/A	G	G	G/A	A/T	A	C/G/A	G	G/A	G/A	A/C	G	G	C	C	G	C/T	G
maex1738	G	A/C	A	G	G	G/A	T	A/G	C/G	G	G	G	A/C	G/A	G/A	C	C/T	G/A	C	G/A
Amino Acid	V/I	T	G	Q	K	R	H/Q	K/E	T/R/K	E	E/K	E/K	Q/K	K/R	E/K	T/I	S/T/Y	R	S/T/P	V/I

	2880	2922	2926	3020	3069	3235	3306	3336	3572	3672	3717	3719	3736	3810	3836	4212	4485	4675	4702	4725
Position	2880	2922	2926	3020	3069	3235	3306	3336	3572	3672	3717	3719	3736	3810	3836	4212	4485	4675	4702	4725
AF151794	C	A	G	T	T	G	G	G	C	C	C	G	G	C	A	T	C	A	T	A
AB721500	C	A	G	T	T	G	G	C	C	C	C	G	G	C	A	T	T	A	T	A
Vienna Zoo	C/T	G/A	G	T/C	T	G	G	C/T	C	C	G	G	C	G/A	T	T	A/G	T	G	A/G
QMJ6480	C/T	G/A	G	T/C	T	G	G	C	C	C	G	G	C	A	T	T/A	A/G	T	G	A/G
521198	C/T	G/A	G	T/C	T	G	G	C	C/A	G	G	G	C	A	T	T	A/G	T	G	A/G
MCZ12454	C/T	A	G	T/C	T/C	G/A	G/T	C	C	C	G	G	C	A	T	T	A	T	G	A/G
MCZ8574	C	G/A	G	T/C	T	G	G	C	C	C	G	G	C/T	A	T	T/C	A	T	G/T	A/G
um3435	C/T	G/A	G	T/C	T	G	G	C/T	C	C/T	G	G	C	A	T/A	T/A	A	T/A	G	A/G
maex1738	C/T	G/A	G/A	T/C	T	G	G/T	C	C	C	G/A	G/A	C	A	T/A	T/C	A/G	T	G	A/G
Amino Acid	P	L	E/K	A/V	V	E/K	P	D	A	C	K	R	R/*	G	F/Y	S/R	R	Y	A/S	K

	4940	4960	5004	5113	5133	5134	5179	5207	5227	5419	5446	5465	5639	5646	5690	6138	6157	6353	6474	6541
Position	4940	4960	5004	5113	5133	5134	5179	5207	5227	5419	5446	5465	5639	5646	5690	6138	6157	6353	6474	6541
AF151794	G	G	G	G	G	C	G	G	C	G	C	T	C	G	C	C	C	T	G	C
AB721500	G	G	A	A	A	T	G	G	C	A	C	T	C	G	C	C	C	T	G	C
Vienna Zoo	G/A	G/A	G/A	G/A	G/A	T	G	G	C	G/A	C	T	C/T	G/A	C	C	C/T	T/C	G/A	C
QMJ6480	G/A	G/A	G/A	G/A	G/A	C/T	G/A	G	C	G/A	C	T	C/T	G	C	C	C/T	T	G/A	C/T
521198	G/A	G/A	G/A	G/A	G/A	C/T	G	G	C	G/A	C	T	C	G/A	C	C	C/T	T	G	C
MCZ12454	G/A	G/A	A	G/A	T/G	G	G	C	G/A	C	T	C	C	G	C/T	C/T	C/T	T	G/A	C
MCZ8574	G/A	G/A	A	G/A	T	G	G	C	C	C	G	G	C	C	C	C/T	T	G	C	G/A
um3435	G/A	G/A	G/A	G/A	G/A	C/T	G	G/A	C/A	G/A	C	T/A	C	C	G	C/T	C/T	T	G	C
maex1738	G/A	G/A	G/A	G/A	G/A	T/A	G	G	C	G/A	C/A	T	C	G	C	C	C/T	T	G	C
Amino Acid	R/K	R/G	G	A/T	E	P/S	V/I	R/Q	L/I	N/D	P/T	V/E	A/V	G	T/I	S/F	C	S/P	G/D	T

	6554	6579	6710	6717	6765	6779	6922	6964	6993	7046	7097	7137	7140	7287	7289	7336	7381	7891	7925	7933
Position	6554	6579	6710	6717	6765	6779	6922	6964	6993	7046	7097	7137	7140	7287	7289	7336	7381	7891	7925	7933
AF151794	C	G	A	C	C	C	T	T	G	G	A	G	G	A	T	C	A	T	G	G
AB721500	C	G	A	C	C	C	T	T	G	G	A	A	G	A	C	A	T	G	G	G
Vienna Zoo	C	G	A/G	C	C/T	C	T/C	T	G	G	A	A	G	A	C	C	A/G	T/C	G	G
QMJ6480	C	G	A/G	C/T	C	C	T/C	T	G/A	G	A	A	G/A	A	T/C	C	A	T/C	G	G
521198	C	G	A/G	C	C/T	C	T/C	T/A	G	G	A	A	G	A	T/C/A	C	A	T/C	G/A	G
MCZ12454	C/T	G	A/G	C	C	C	T/C	T	G/A	G	A	A	G	A/T	A	C/T	A	T/C	G	G
MCZ8574	C	G	A/G	C	C/T	C/T	T/C	T	G	G/A	A/G	A/C	G	A	C	C	A	T/C	G/A	G/A
um3435	C	G/A	A/G	C	C	C	T/C	T/A	G/A	G	A	A/C	G	A	T/C	C	A	T/C	G	G
maex1738	C	G	A/G	C	C	C	T/C	T/A	G/A	G	A	A/T	G	A/T	T/C	C	A	T/C	G	G
Amino Acid	R/W	R/Q	K/E	P/L	P/L	Q/*	P	Y/*	G/E	G/R	N/D	R/H/P/K	S/N	H/P	P/S	L	L	L	-	-

	7938	8071	8076	8080	8091	8092	8405	8410	8412	8426	8430	8439	8440
Position	7938	8071	8076	8080	8091	8092	8405	8410	8412	8426	8430	8439	8440
AF151794	T	G	A	G	G	G	T	A	A	A	G	A	T
AB721500	T	G	G	A	G	G	T	G	A	A	G	A	T
Vienna Zoo	T	G/A	A/G	G/A	G/A	G	T/C	A/G	A/T	A/T	G/A	A	T/A
QMJ6480	T	G	A/G	G/A	G	G/A	T/C	A/G	A/T	A	G	A	T/G
521198	T	G	A/G	G/A	G/A	G	T/C	A/G	A/T	A	G	A	T/A
MCZ12454	T	G	A/G	G/A	G	G	T/C	A/G	A/T	A	G	A	T/C
MCZ8574	T	G	A/G	G/A	C/T	G	T/C	A/G	A/T	A	G	A	T
um3435	T	G	A/G	G/A	G	G	T/C	G	A/T	A	G	A	T/A
maex1738	T/G	G	A/G	G/A	G	G	T/C	G	A/T	A	G	A/T	G
Amino Acid	-	-	-	-	-	-	-	-	-	-	-	-	-

-Non coding regions

Position numbers follow those of the KoRV reference genome, GenBank accession AF151794

The first two sequences are from Genbank; the "Vienna Zoo" koala is PCI-SN265; for other koala specimens see Table 1

Variation present in more than two koalas (shared)

Variation present in one koala (private)

Fixed difference

The first amino acid corresponds to AF151794; the second or subsequent amino acids are in order of appearance in the rows. Asterisk (*) indicates a stop codon