

Table S1: List of RABV sequences included in the phylogenetic analysis for both the partial N gene and G-L intergenic region.

Year Sampled	Sample Number	Species	Country	Province	Latitude	Longitude	Accession number (partial N gene)	Accession number (G-L gene region)
1989	399	Jackal	Botswana	Tsabong	-25.754	22.41838	AY330747	--
1990	420/90	Yellow mongoose	South Africa	North West	-27.1974	25.98311	FJ392383	AF079921
1990	m466	Yellow mongoose	South Africa	Free State	-27.374	26.61996	--	AF079922
1991	19671	African civet	Zimbabwe	Manicaland	-18.5279	32.12843	KY553266	AF304188
1994	22574	African civet	Zimbabwe	Mashonaland East	-18.6173	31.5736	KY553255	AF304183
2003	KZNdg03.453	Canine	South Africa	KwaZulu-Natal	-29.8579	31.0292	--	DQ841514
2006	696/06	Yellow mongoose	South Africa	Free State	-27.6504	27.23488	JQ692994	--
2008	UPV128	Canine	South Africa	KwaZulu-Natal	-29.8579	31.0292	JF747613	--
2011	11_185	Canine	South Africa	KwaZulu-Natal	-29.5093	30.19838	KJ744305	--
2012	556/12	Canine	South Africa	North West	-25.2775	27.21605	KT892003	MK103308
2014	889/14	African wild dog	South Africa	North West	-24.7435	26.25732	KT891999	--
2015	471/15	Canine	South Africa	North West	-27.2371	26.23514	MT454634	MT454634
2015	682/15	Canine	South Africa	North West	-24.7435	26.25732	MT454635	MT454635
2015	KZNbov15/261	Bovine	South Africa	KwaZulu-Natal	-29.4893	30.21665	--	KY681395

2016	516/16	Canine	South Africa	North West	-25.4261	27.2243	MT454636	MT454636
2016	635/16	Canine	South Africa	North West	-25.8026	27.87506	MT454639	MT454639
2017	NWdog17/17	Canine	South Africa	North West	-25.7905	27.2421	MW344002	MW343892
2017	NWbov22/17	Bovine	South Africa	North West	-26.9566	24.7284	MW344003	MW343893
2017	NWdog31/17	Canine	South Africa	North West	-25.1609	27.16296	MW344014	MW343904
2017	NWbov57/17	Bovine	South Africa	North West	-26.9566	24.7284	MW344005	MW343895
2017	NWbov59/17	Bovine	South Africa	North West	-27.1887	25.32931	MW344007	MW343897
2017	NWbov62/17	Bovine	South Africa	North West	-26.8648	24.79046	MW344015	MW343905
2017	NWbov74/17	Bovine	South Africa	North West	-26.9566	24.7284	MW344011	MW343901
2017	NWbov126/17	Bovine	South Africa	North West	-26.9566	24.7284	MW344016	MW343906
2017	NWjac198/17	Jackal	South Africa	North West	-26.6864	25.45907	MW344017	MW343907
2017	NWbov331/17	Bovine	South Africa	North West	-27.1887	25.32931	MW344018	MW343908
2017	NWbov432/17	Bovine	South Africa	North West	-26.1739	26.46947	MW343988	MW343878
2017	NWbov435/17	Bovine	South Africa	North West	-26.9566	24.7284	MW344004	MW343894
2017	NWcap528/17	Caprine	South Africa	North West	-27.5311	24.78659	MW343987	MW343877
2017	NWovi583/17	Ovine	South Africa	North West	-27.5311	24.78659	MW344006	MW343896
2017	NWbov604/17	Bovine	South Africa	North West	-26.9566	24.7284	MW343989	MW343879

2017	NWcap608/17	Caprine	South Africa	North West	-25.1334	26.86546	MW344008	MW343898
2017	NWbov630/17	Bovine	South Africa	North West	-26.125	23.7725	MW344009	MW343899
2017	NWbbj666/17	Black-backed jackal	South Africa	North West	-26.2802	25.10966	MW344010	MW343900
2017	GPdog574/17	Canine	South Africa	Gauteng	-25.4729	28.09919	MW344012	MW343902
2017	269/17	Canine	South Africa	North West	-26.9566	24.7284	MT454643	MT454643
2017	400/17	Canine	South Africa	North West	-26.9566	24.7284	MT454645	MT454645
2017	454/17	Black-backed jackal	South Africa	North West	-26.7167	27.1	MT454646	MT454646
2017	460/17	Black-backed jackal	South Africa	North West	-26.5961	24.17612	MT454647	MT454647
2017	474/17	Black-backed jackal	South Africa	North West	-27.5311	24.78659	MT454649	MT454649
2017	477/17	Bat-eared fox	South Africa	North West	-26.6181	25.65319	MT454650	MT454650
2017	480/17	Black-backed jackal	South Africa	North West	-27.1887	25.32931	MT454651	MT454651
2017	466/17	Black-backed jackal	South Africa	North West	-26.7167	27.1	MT454648	MT454648
2017	483/17	Black-backed jackal	South Africa	North West	-26.3138	26.89865	MT454652	MT454652
2017	502/17	Black-backed jackal	South Africa	North West	-26.7167	27.1	MT454653	MT454653

2017	503/17	Black-backed jackal	South Africa	North West	-26.7167	27.1	MT454654	MT454654
2017	LPbov354/17	Bovine	South Africa	Limpopo	-24.5917	27.41155	MW343945	MW343835
2018	NWdog44/18	Canine	South Africa	North West	-26.152	26.15968	MW343985	MW343875
2018	NWbbj110/18	Black-backed jackal	South Africa	North West	-27.1718	26.12699	MW343983	MW343873
2018	NWdog121/18	Canine	South Africa	North West	-26.4677	26.83939	MW343984	MW343874
2018	NWbbj135/18	Black-backed jackal	South Africa	North West	-26.9566	24.7284	MW343990	MW343880
2018	NWbbj195/18	Black-backed jackal	South Africa	North West	-26.2833	26.8	MW343986	MW343876
2018	NWdog270/18	Canine	South Africa	North West	-25.354	26.53009	MW344019	MW343909
2018	NWdog293/18	Canine	South Africa	North West	-25.1334	26.86546	MW344020	MW343910
2018	NWbov299/18	Bovine	South Africa	North West	-27.4377	25.13069	MW343991	MW343881
2018	NWbbj343/18	Black-backed jackal	South Africa	North West	-27.914	25.16111	MW343981	MW343871
2018	NWbov382/18	Bovine	South Africa	North West	-26.152	26.15968	MW343997	MW343887
2018	NWbbj387/18	Black-backed jackal	South Africa	North West	-26.8097	27.28492	MW343998	MW343888
2018	NWdog391/18	Canine	South Africa	North West	-26.8351	27.04304	MW343999	MW343889

2018	NWdog405/18	Canine	South Africa	North West	-25.8963	27.42684	MW344021	MW343911
2018	NWdog420/18	Canine	South Africa	North West	-25.605	27.91	MW344000	MW343890
2018	NWovi429/18	Ovine	South Africa	North West	-26.4748	27.06278	MW344001	MW343891
2018	NWjac455/18	Jackal	South Africa	North West	-26.152	26.15968	MW343978	MW343868
2018	NWgen516/18	Genet	South Africa	North West	-25.537	26.07512	MW344022	MW343912
2018	NWbef103/18	Bat-eared fox	South Africa	North West	-26.1944	24.92368	MW344013	MW343861
2019	GPbov309/19	Bovine	South Africa	Gauteng	-26.0858	27.77515	MW343994	MW343884
2019	NWbov76/19	Bovine	South Africa	North West	25.16111	24.17612	MW343969	MW343859
2019	NWbbj96/19	Black-backed jackal	South Africa	North West	-26.3138	26.89865	MW343970	MW343860
2019	NWcap103/19	Caprine	South Africa	North West	-26.8091	26.00538	MW343971	MW343861
2019	NWbov109/19	Bovine	South Africa	North West	-26.9566	24.7284	MW343972	MW343862
2019	NWbov151/19	Bovine	South Africa	North West	-25.1334	26.86546	MW343982	MW343872
2019	NWdog169/19	Canine	South Africa	North West	-26.8091	26.00538	MW343975	MW343865
2019	NWward171/19	Aardwolf	South Africa	North West	-25.6676	27.24208	MW343976	MW343866
2019	NWdog191/19	Canine	South Africa	North West	-25.6676	27.24208	MW343973	MW343863
2019	NWbbj219/19	Black-backed jackal	South Africa	North West	-25.6676	27.24208	MW343974	MW343864

2019	NWbbj248/19	Black-backed jackal	South Africa	North West	-26.8521	26.66672	MW343977	MW343867
2019	NWjac325/19	Jackal	South Africa	North West	-25.6676	27.24208	MW343979	MW343869
2019	NWbov331/19	Bovine	South Africa	North West	-25.354	26.53009	MW343980	MW343870
2019	NWbov379/19	Bovine	South Africa	North West	-26.9333	25.41667	MW343992	MW343882
2019	NWbov380/19	Bovine	South Africa	North West	-27.2231	25.27706	MW343995	MW343885
2019	NWbov428/19	Bovine	South Africa	North West	-26.2	25.9	MW343996	MW343886

Sample numbers for sequences generated in this study are shown in bold.