

Table S1. Results from BLAST search using sequences of ITS1, COX1 and 18S of *Sarcocystis* sp. ex *Stercorarius chilensis*

Locus	Genbank number	Species	Percent identity	N° gaps	N° of nucleotide substitutions	Sequences obtained from:	
						Definitive host	Intermediate host
18S	MH130211.1; MF946587.1	<i>Sarcocystis halietai</i>	99.74%	0	2	<i>Haliaeetus albicilla</i>	<i>Phalacrocorax carbo</i>
18S	KY348753.1	<i>Sarcocystis</i> sp. ex <i>Accipiter cooperii</i>	99.74%	0	2	<i>Accipiter cooperii</i>	
18S	JQ733511.1	<i>Sarcocystis</i> sp. ex <i>Phalacrocorax carbo</i> is. Dkom1	99.74%	0	2	Unknown	<i>Phalacrocorax carbo</i>
18S	GQ245670.1	<i>Sarcocystis</i> sp. ex <i>Columba livia</i>	99.74%	0	2	Unknown	<i>Columba livia</i>
18S	EU502869.2	<i>Sarcocystis</i> sp. ex <i>Anser albifrons</i> is. 09	99.74%	0	2	Unknown	<i>Anser albifrons</i>
18S	EU810398.1	<i>Sarcocystis</i> sp. CH1918-03	99.74%	0	2	<i>Accipiter cooperii</i>	
18S	MG273671.1	<i>Sarcocystis fulicae</i>	99.62%	0	3	Unknown	<i>Fulica atra</i>
18S	JN256117.1	<i>Sarcocystis corvusi</i>	99.62%	0	3	Unknown	<i>Corvus monedula</i>
18S	GU187943.1	<i>Sarcocystis</i> sp. MK-2010	99.62%	0	3	Unknown	<i>Nyctereutes procyonoides viverrinus</i>
18S	HM125054.1; GU253883.1	<i>Sarcocystis columbae</i>	99.62%	0	3		<i>Columba palumbus</i>
18S	EU810399.1	<i>Sarcocystis</i> sp. CH327-04	99.62%	0	3	<i>Accipiter cooperii</i>	Unknown
18S	EU810397.1	<i>Sarcocystis</i> sp. CH255-04	99.62%	0	3	<i>Accipiter cooperii</i>	Unknown
18S	KY994649.1	<i>Sarcocystis jamaicensis</i>	99.49%	0	4	<i>Buteo jamaicensis</i>	Unknown
18S	EU810402.1	<i>Sarcocystis</i> sp. CH13-04	99.49%	0	4	<i>Accipiter cooperii</i>	Unknown
18S	KM362428.1	<i>Sarcocystis</i> sp. 1 SN-2013	99.49%	0	4	Unknown	<i>Canis familiaris</i>
18S	JF975681.1	<i>Sarcocystis turdusi</i>	99.49%	0	4	Unknown	<i>Turdus merula</i>
18S	GU253884.1	<i>Sarcocystis</i> sp. ex <i>Accipiter nisus</i>	99.49%	0	4	<i>Accipiter nisus</i>	Unknown
18S	EU810401.1	<i>Sarcocystis</i> sp. CH318-04	99.49%	0	4	<i>Accipiter cooperii</i>	Unknown
18S	EU810395.1	<i>Sarcocystis</i> sp. RTH378-04	99.49%	0	4	<i>Buteo jamaicensis</i>	Unknown
18S	MF946588.1; JQ733508.1	<i>Sarcocystis lari</i>	99.36%	0	5	<i>Haliaeetus albicilla</i>	<i>Larus marinus</i>
18S	JN256677.1	<i>Sarcocystis</i> sp. CO1	99.36%	0	5	Unknown	<i>Canis familiaris</i>

18S	EU810396.1	<i>Sarcocystis</i> sp. RH168-04	99.36%	0	5	<i>Buteo lineatus</i>	
18S	MT036251.1; MT036248.1	<i>Sarcocystis lutrae</i>	99.23%	1	6	Unknown	<i>Nyctereutes procyonoides</i>
18S	MN169125.1	<i>Sarcocystis neurona</i>	99.23%	0	6	Unknown	<i>Felis domesticus</i>
18S	MF596215.1.-MF596216.1; MG372102.1-MG372103.1; MG272286.1-MG272295.1	<i>Sarcocystis lutrae</i>	99.23%	1	6		<i>Not specified</i> <i>Lutra lutra, Meles meles</i> <i>Mustelidae</i>
18S	KX470746.1	<i>Sarcocystis</i> sp. isolate 5	99.23%	0	6	<i>Didelphis aurita</i>	Unknown
18S	KT207459.1	<i>Sarcocystis speeri</i>	99.23%	0	6	<i>Didelphis albiventris</i>	Unknown
18S	KM657769.1	<i>Sarcocystis lutrae</i>	99.23%	1	6	Unknown	<i>Lutra lutra</i>
18S	EU810400.1	<i>Sarcocystis</i> sp. CH47-04	99.23%	0	6	<i>Accipiter cooperii</i>	
18S	KP681854.1	<i>Sarcocystis speeri</i>	99.11%	0	7	Unknown	
18S	MK803217.1	<i>Sarcocystis</i> sp. isolate Sarco-BA1	99.11%	0	7	<i>Didelphis spp.</i>	
18S	MH626537.1	<i>Sarcosytis falcata</i>	99.11%	0	7		<i>Trichoglossus moluccanus</i>
18S	KX610767.1-KX610769.1	<i>Sarcocystis</i> sp. isolate B200	99.11%	0	7	<i>Didelphis spp.</i>	
18S	AF009245.1	<i>Frenkelia glareoli</i>	99.11%	0	7	Unknown	<i>Clethrionomys glareolus</i>
18S	KJ957839.1	<i>Sarcocystis neurona</i>	99.11%	0	7	Unknown	<i>Canis familiaris</i>
18S	EU553478.2	<i>Sarcocystis cornixi</i>	98.98%	2	8	Unknown	<i>Corvus cornix</i>
COX1	MH138314.1	<i>Sarcocystis corvusi</i>	100.00%	0	0	Unknown	
COX1	MH138312.1	<i>Sarcocystis columbae</i>	100.00%	0	0	Unknown	
COX1	MH138308.1-MH138309.1; MF946583.1	<i>Sarcocystis halietai</i>	100.00%	0	0	<i>Haliaeetus albicilla</i>	<i>Phalacrocorax carbo</i>
COX1	MH138316.1	<i>Sarcocystis fulicae</i>	99.82%	0	1	Unknown	<i>Fulica atra</i>
COX1	MH138315.1	<i>Sarcocystis wobeseri</i>	99.82%	0	1	Unknown	
COX1	MH138313.1	<i>Sarcocystis cornixi</i>	99.82%	0	1		<i>Corvus cornix</i>
COX1	KY348756.1	<i>Sarcocystis</i> sp. ex <i>Accipiter cooperii</i>	99.82%	0	1	<i>Accipiter cooperii</i>	
COX1	MT036254.1; MT036250.1; MG273661.1-MG273670.1; MF596284.1-MF596285; MG372106.1-MG372107.1;	<i>Sarcocystis lutrae</i>	99.63%	0	2	Unknown	<i>Nyctereutes procyonoides,</i> <i>Procyon lotor</i> <i>Neovison vison, Martes</i> <i>foina, Meles meles, Lutra</i>

	KF601326.1						<i>lutra, Mustela putorius, Vulpes lagopus</i>
COX1	MF596283.1-MF946584.1	<i>Sarcocystis lari</i>	99.63%	0	2	Unknown	<i>Larus marinus</i>
COX1	KT588511.1-KT588518.1	<i>Sarcocystis turdusi</i>	99.63%	0	2	Unknown	<i>Turdidae, Muscipidae</i>
COX1	KY994652.1	<i>Sarcocystis jamaicensis</i>	99.45%	0	3	<i>Buteo jamaicensis</i>	Unknown
COX1	MF162317.1	<i>Sarcocystis</i> sp. SKV-2017a	99.09%	0	5	<i>Strix varia</i>	Unknown
COX1	MH469240.1	<i>Sarcocystis caninum</i>	98.72%	0	7	Unknown	<i>Canis familiaris</i>
ITS1	MN450340.1-MF450341.1; MH130209.1	<i>Sarcocystis halietae</i>	96.22%	0	31	Unknown	<i>Larus argentatus</i> <i>Phalacrocorax carbo</i>
ITS1	JQ733513.1	<i>Sarcocystis</i> sp. ex <i>Phalacrocorax carbo</i> isolate Dkorm1	96.22%	1	31	Unknown	<i>Phalacrocorax carbo</i>
ITS1	MN450342.1-MN450356.1; MF946589.1	<i>Sarcocystis halietae</i>	96.10%	0	32	<i>Haliaeetus albicilla</i>	<i>Larus argentatus</i>
ITS1	MF946590.1; MF946593.1	<i>Sarcocystis halietae</i>	95.98%	0	33	<i>Haliaeetus albicilla</i>	Unknown
ITS1	MF946596.1	<i>Sarcocystis halietae</i>	95.85%	2	34	<i>Haliaeetus albicilla</i>	Unknown
ITS1	MF946591.1-MF946592.1	<i>Sarcocystis halietae</i>	95.73%	0	35	<i>Haliaeetus albicilla</i>	Unknown
ITS1	MF946594.1-MF946595.1	<i>Sarcocystis halietae</i>	95.61%	0	36	<i>Haliaeetus albicilla</i>	Unknown
ITS1	KY348755.1	<i>Sarcocystis</i> sp. ex <i>Accipiter cooperii</i>	92.95%	4	58	<i>Accipiter cooperii</i>	Unknown
ITS1	MN450338.1-MN450339.1; GU253885.1	<i>Sarcocystis columbae</i>	91.99%	5	66	Unknown	<i>Larus argentatus</i> <i>Columba palumbus</i>
ITS1	HM125052.1	<i>Sarcocystis columbae</i>	91.87%	6	67	Unknown	<i>Columba palumbus</i>
ITS1	JN256119.1	<i>Sarcocystis corvusi</i>	91.06%	8	74	Unknown	<i>Corvus monedula</i>
ITS1	FJ232948.1	<i>Sarcocystis</i> sp. ex <i>Columba livia</i>	83.89%	27	134	Unknown	<i>Columba livia</i>
ITS1	KC733715.1-KC733718.1	<i>Sarcocystis calchasi</i>	83.69%	29	136	Unknown	Psittacidae
ITS1	MN450370.1-MN450373.1; HM159421.1	<i>Sarcocystis wobeseri</i>	83.55%	35	138	Unknown	<i>Larus argentatus</i>
ITS1	MN450365.1-MN450369.1; GU475111.1	<i>Sarcocystis wobeseri</i>	83.43%	35	139	Unknown	<i>Larus argentatus</i> <i>Anas platyrhynchos, Branta leucopsis</i>

ITS1	JN256121.1	<i>Sarcocystis wobeseri</i>	83.31%	35	140	Unknown	<i>Anas platyrhynchos</i>
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