

Table S1. List of tested animals with estimated membership coefficient value (q).

Sample	Takson	Origin of the sample	Estimated membership coefficient value (q)	
			Alpaca	Llama
1	<i>Vicugna pacos</i>	England	0.996	0.004
2	<i>Vicugna pacos</i>	England	0.997	0.003
3	<i>Vicugna pacos</i>	England	0.983	0.017
4	<i>Vicugna pacos</i>	Poland	0.996	0.004
5	<i>Vicugna pacos</i>	Poland	0.997	0.003
6	<i>Vicugna pacos</i>	Poland	0.996	0.004
7	<i>Vicugna pacos</i>	England	0.996	0.004
8	<i>Vicugna pacos</i>	England	0.994	0.006
9	<i>Vicugna pacos</i>	The Netherlands	0.997	0.003
10	<i>Vicugna pacos</i>	Poland	0.997	0.003
11	<i>Vicugna pacos</i>	Poland	0.995	0.005
12	<i>Vicugna pacos</i>	Chile	0.996	0.004
13	<i>Vicugna pacos</i>	Poland	0.996	0.004
14	<i>Vicugna pacos</i>	Poland	0.994	0.006
15	<i>Vicugna pacos</i>	Chile	0.801	0.199
16	<i>Vicugna pacos</i>	Poland	0.989	0.011
17	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
18	<i>Vicugna pacos</i>	Chile	0.996	0.004
19	<i>Vicugna pacos</i>	Chile	0.984	0.016
20	<i>Vicugna pacos</i>	Poland	0.998	0.002
21	<i>Vicugna pacos</i>	Poland	0.994	0.006
22	<i>Vicugna pacos</i>	England	0.996	0.004
23	<i>Vicugna pacos</i>	England	0.995	0.005
24	<i>Vicugna pacos</i>	England	0.910	0.090
25	<i>Vicugna pacos</i>	Poland	0.996	0.004
26	<i>Vicugna pacos</i>	Belgium	0.994	0.006
27	<i>Vicugna pacos</i>	Belgium	0.988	0.012
28	<i>Vicugna pacos</i>	Belgium	0.989	0.012
29	<i>Vicugna pacos</i>	England	0.988	0.012
30	<i>Vicugna pacos</i>	Poland	0.994	0.006
31	<i>Vicugna pacos</i>	England	0.990	0.010
32	<i>Vicugna pacos</i>	Poland	0.998	0.002
33	<i>Vicugna pacos</i>	England	0.996	0.004
34	<i>Vicugna pacos</i>	Poland	0.986	0.014
35	<i>Vicugna pacos</i>	Poland	0.997	0.003
36	<i>Vicugna pacos</i>	Australia	0.998	0.002
37	<i>Vicugna pacos</i>	Belgium	0.995	0.006
38	<i>Vicugna pacos</i>	Belgium	0.991	0.009
39	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
40	<i>Vicugna pacos</i>	Australia	0.992	0.008
41	<i>Vicugna pacos</i>	Poland	0.946	0.054

42	<i>Vicugna pacos</i>	England	0.995	0.005
43	<i>Vicugna pacos</i>	Poland	0.998	0.002
44	<i>Vicugna pacos</i>	Belgium	0.990	0.010
45	<i>Vicugna pacos</i>	Belgium	0.995	0.005
46	<i>Vicugna pacos</i>	England	0.997	0.003
47	<i>Vicugna pacos</i>	England	0.987	0.013
48	<i>Vicugna pacos</i>	Czech Republic	0.995	0.005
49	<i>Vicugna pacos</i>	Unknown*	0.986	0.014
50	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
51	<i>Vicugna pacos</i>	Poland	0.993	0.007
52	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
53	<i>Vicugna pacos</i>	Unknown*	0.990	0.010
54	<i>Vicugna pacos</i>	Unknown*	0.985	0.015
55	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
56	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
57	<i>Vicugna pacos</i>	Unknown*	0.994	0.006
58	<i>Vicugna pacos</i>	Unknown*	0.993	0.008
59	<i>Vicugna pacos</i>	Unknown*	0.993	0.007
60	<i>Vicugna pacos</i>	Unknown*	0.994	0.006
61	<i>Vicugna pacos</i>	Unknown*	0.988	0.012
62	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
63	<i>Vicugna pacos</i>	Unknown*	0.993	0.007
64	<i>Vicugna pacos</i>	Unknown*	0.981	0.019
65	<i>Vicugna pacos</i>	Unknown*	0.995	0.006
66	<i>Vicugna pacos</i>	Unknown*	0.991	0.009
67	<i>Vicugna pacos</i>	Unknown*	0.894	0.106
68	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
69	<i>Vicugna pacos</i>	Poland	0.976	0.024
70	<i>Vicugna pacos</i>	Poland	0.998	0.002
71	<i>Vicugna pacos</i>	Poland	0.997	0.003
72	<i>Vicugna pacos</i>	Poland	0.997	0.003
73	<i>Vicugna pacos</i>	Poland	0.995	0.005
74	<i>Vicugna pacos</i>	Poland	0.998	0.002
75	<i>Vicugna pacos</i>	Poland	0.996	0.004
76	<i>Vicugna pacos</i>	Poland	0.995	0.005
77	<i>Vicugna pacos</i>	Switzerland	0.996	0.004
78	<i>Vicugna pacos</i>	Poland	0.997	0.003
79	<i>Vicugna pacos</i>	Poland	0.995	0.005
80	<i>Vicugna pacos</i>	Poland	0.994	0.007
81	<i>Vicugna pacos</i>	Poland	0.989	0.011
82	<i>Vicugna pacos</i>	The Netherlands	0.984	0.016
83	<i>Vicugna pacos</i>	Chile	0.997	0.004
84	<i>Vicugna pacos</i>	USA	0.996	0.004
85	<i>Vicugna pacos</i>	Poland	0.998	0.002
86	<i>Vicugna pacos</i>	Poland	0.986	0.014
87	<i>Vicugna pacos</i>	Germany	0.984	0.017

88	<i>Vicugna pacos</i>	Poland	0.997	0.003
89	<i>Vicugna pacos</i>	Poland	0.995	0.005
90	<i>Vicugna pacos</i>	Poland	0.994	0.006
91	<i>Vicugna pacos</i>	Germany	0.997	0.003
92	<i>Vicugna pacos</i>	Poland	0.982	0.018
93	<i>Vicugna pacos</i>	Poland	0.998	0.002
94	<i>Vicugna pacos</i>	Poland	0.990	0.010
95	<i>Vicugna pacos</i>	Poland	0.988	0.012
96	<i>Vicugna pacos</i>	Poland	0.994	0.006
97	<i>Vicugna pacos</i>	Poland	0.996	0.004
98	<i>Vicugna pacos</i>	Poland	0.996	0.004
99	<i>Vicugna pacos</i>	England	0.995	0.005
100	<i>Vicugna pacos</i>	Poland	0.996	0.004
101	<i>Vicugna pacos</i>	Poland	0.992	0.008
102	<i>Vicugna pacos</i>	England	0.997	0.003
103	<i>Vicugna pacos</i>	Poland	0.998	0.002
104	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
105	<i>Vicugna pacos</i>	Poland	0.996	0.004
106	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
107	<i>Vicugna pacos</i>	Poland	0.997	0.003
108	<i>Vicugna pacos</i>	Unknown*	0.994	0.006
109	<i>Vicugna pacos</i>	Poland	0.989	0.011
110	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
111	<i>Vicugna pacos</i>	Poland	0.998	0.002
112	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
113	<i>Vicugna pacos</i>	Poland	0.992	0.008
114	<i>Vicugna pacos</i>	Unknown*	0.988	0.012
115	<i>Vicugna pacos</i>	Poland	0.922	0.078
116	<i>Vicugna pacos</i>	Unknown*	0.993	0.007
117	<i>Vicugna pacos</i>	Poland	0.997	0.003
118	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
119	<i>Vicugna pacos</i>	Poland	0.996	0.004
120	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
121	<i>Vicugna pacos</i>	Poland	0.994	0.006
122	<i>Vicugna pacos</i>	Unknown*	0.998	0.002
123	<i>Vicugna pacos</i>	Poland	0.997	0.003
124	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
125	<i>Vicugna pacos</i>	Poland	0.996	0.004
126	<i>Vicugna pacos</i>	Unknown*	0.994	0.006
127	<i>Vicugna pacos</i>	Poland	0.992	0.008
128	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
129	<i>Vicugna pacos</i>	Poland	0.996	0.004
130	<i>Vicugna pacos</i>	Unknown*	0.980	0.020
131	<i>Vicugna pacos</i>	Poland	0.995	0.005
132	<i>Vicugna pacos</i>	Unknown*	0.994	0.006
133	<i>Vicugna pacos</i>	Poland	0.949	0.051

134	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
135	<i>Vicugna pacos</i>	Poland	0.995	0.005
136	<i>Vicugna pacos</i>	Unknown*	0.953	0.047
137	<i>Vicugna pacos</i>	Poland	0.974	0.026
138	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
139	<i>Vicugna pacos</i>	Poland	0.996	0.004
140	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
141	<i>Vicugna pacos</i>	Poland	0.988	0.012
142	<i>Vicugna pacos</i>	Unknown*	0.991	0.009
143	<i>Vicugna pacos</i>	Poland	0.974	0.026
144	<i>Vicugna pacos</i>	Unknown*	0.994	0.006
145	<i>Vicugna pacos</i>	Poland	0.996	0.004
146	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
147	<i>Vicugna pacos</i>	Poland	0.997	0.003
148	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
149	<i>Vicugna pacos</i>	Poland	0.992	0.008
150	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
151	<i>Vicugna pacos</i>	Poland	0.997	0.003
152	<i>Vicugna pacos</i>	Unknown*	0.998	0.002
153	<i>Vicugna pacos</i>	Poland	0.998	0.002
154	<i>Vicugna pacos</i>	Unknown*	0.992	0.008
155	<i>Vicugna pacos</i>	Poland	0.910	0.090
156	<i>Vicugna pacos</i>	Unknown*	0.867	0.133
157	<i>Vicugna pacos</i>	Poland	0.995	0.005
158	<i>Vicugna pacos</i>	Unknown*	0.993	0.007
159	<i>Vicugna pacos</i>	Unknown*	0.992	0.008
160	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
161	<i>Vicugna pacos</i>	Unknown*	0.987	0.013
162	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
163	<i>Vicugna pacos</i>	Chile	0.938	0.063
164	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
165	<i>Vicugna pacos</i>	Unknown*	0.993	0.007
166	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
167	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
168	<i>Vicugna pacos</i>	Unknown*	0.948	0.052
169	<i>Vicugna pacos</i>	Unknown*	0.998	0.002
170	<i>Vicugna pacos</i>	Unknown*	0.987	0.013
171	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
172	<i>Vicugna pacos</i>	Unknown*	0.994	0.006
173	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
174	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
175	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
176	<i>Vicugna pacos</i>	Unknown*	0.992	0.008
177	<i>Vicugna pacos</i>	Unknown*	0.984	0.016
178	<i>Vicugna pacos</i>	Unknown*	0.994	0.006
179	<i>Vicugna pacos</i>	Unknown*	0.997	0.003

180	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
181	<i>Vicugna pacos</i>	Unknown*	0.993	0.007
182	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
183	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
184	<i>Vicugna pacos</i>	Unknown*	0.998	0.002
185	<i>Vicugna pacos</i>	Unknown*	0.998	0.002
186	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
187	<i>Vicugna pacos</i>	Unknown*	0.946	0.054
188	<i>Vicugna pacos</i>	Unknown*	0.917	0.083
189	<i>Vicugna pacos</i>	Unknown*	0.994	0.006
190	<i>Vicugna pacos</i>	Unknown*	0.996	0.005
191	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
192	<i>Vicugna pacos</i>	Unknown*	0.966	0.034
193	<i>Vicugna pacos</i>	Unknown*	0.998	0.002
194	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
195	<i>Vicugna pacos</i>	Unknown*	0.991	0.009
196	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
197	<i>Vicugna pacos</i>	Unknown*	0.994	0.006
198	<i>Vicugna pacos</i>	Unknown*	0.993	0.007
199	<i>Vicugna pacos</i>	Unknown*	0.983	0.017
200	<i>Vicugna pacos</i>	Unknown*	0.998	0.002
201	<i>Vicugna pacos</i>	Chile	0.996	0.004
202	<i>Vicugna pacos</i>	Unknown*	0.994	0.006
203	<i>Vicugna pacos</i>	Chile	0.992	0.008
204	<i>Vicugna pacos</i>	Unknown*	0.996	0.004
205	<i>Vicugna pacos</i>	Unknown*	0.985	0.015
206	<i>Vicugna pacos</i>	Unknown*	0.993	0.007
207	<i>Vicugna pacos</i>	Unknown*	0.986	0.014
208	<i>Vicugna pacos</i>	Unknown*	0.955	0.045
209	<i>Vicugna pacos</i>	Unknown*	0.992	0.008
210	<i>Vicugna pacos</i>	Unknown*	0.997	0.003
211	<i>Vicugna pacos</i>	Unknown*	0.998	0.002
212	<i>Vicugna pacos</i>	Unknown*	0.985	0.015
213	<i>Vicugna pacos</i>	Unknown*	0.986	0.014
214	<i>Vicugna pacos</i>	Unknown*	0.988	0.012
215	<i>Vicugna pacos</i>	Unknown*	0.993	0.007
216	<i>Vicugna pacos</i>	Unknown*	0.995	0.005
217	<i>Lama glama</i>	Unknown*	0.002	0.998
218	<i>Lama glama</i>	Unknown*	0.002	0.998
219	<i>Lama glama</i>	Unknown*	0.003	0.997
220	<i>Lama glama</i>	England	0.018	0.982
221	<i>Lama glama</i>	Hungary	0.004	0.996
222	<i>Lama glama</i>	Unknown*	0.002	0.998
223	<i>Lama glama</i>	Unknown*	0.002	0.998
224	<i>Lama glama</i>	Unknown*	0.002	0.998
225	<i>Lama glama</i>	Unknown*	0.003	0.997

226	<i>Lama glama</i>	Unknown*	0.005	0.995
227	<i>Lama glama</i>	Unknown*	0.002	0.998
228	<i>Lama glama</i>	Unknown*	0.002	0.998
229	<i>Lama glama</i>	Unknown*	0.006	0.994
230	<i>Lama glama</i>	Unknown*	0.018	0.982
231	<i>Lama glama</i>	Unknown*	0.207	0.794
232	<i>Lama glama</i>	Poland	0.002	0.998
233	<i>Vicugna pacos</i>	England	0.926	0.074
234	<i>Lama glama</i>	Unknown*	0.003	0.997

*It is believed that most individuals of unknown origin were imported from Chile.