



Genetic Characterization of Pakistani Goat Breeds through Mitochondrial D-Loop and Cytochrome b Gene Analyses

Haleema Sadia¹, Masroor Ellahi Babar², Asif Nadeem³, Tanveer Hussain⁴,
Muhammad Tariq Parvez⁵, Muhammad Muzammal⁶, Hafiz Ullah⁶ and Jabbar Khan⁷

¹Department of Biotechnology, BUIITEMS, Quetta, Pakistan.

²The University of Agriculture, Dera Ismail Khan, Pakistan

³Department of Biotechnology, Virtual University of Pakistan, Lahore, Pakistan.

⁴Department of Molecular Biology, Virtual University of Pakistan, Lahore, Pakistan

⁵Department of Bioinformatics & Computational Biology, Virtual University of Pakistan, Lahore, Pakistan

⁶Gomal Centre of Biochemistry and Biotechnology, Gomal University, Dera Ismail Khan, Pakistan.

⁷Institute of Biological Sciences, Gomal University, Dera Ismail Khan, Pakistan

Haleema Sadia, Masroor Ellahi Babar, Asif Nadeem and Tanveer Hussain contributed equally in this article.

Supplementary Table 1: Polymorphic sites detected in cytochrome b and the D-loop region of goat.

Sr. No	SNPs Position	SNP Nucleotide	Change with	Transition / Transversion
1	14151	A	G	Transition
2	14158	A	G	Transition
3	14187	A	G	Transition
4	14192	A	C	Transversion
5	14193	A	C	Transversion
6	14199	G	A	Transition
7	14217	A	G	Transition
8	14255	C	T	Transition
9	14256	C	G	Transversion
10	14260	T	G	Transversion
11	14282	A	G	Transition
12	14286	C	T	Transition
13	14288	G	A	Transition
14	14291	A	G	Transition
15	14316	T	C	Transition
16	14324	C	T	Transition
17	14333	A	G	Transition

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* Corresponding author: sjabbarkhan@yahoo.com
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Sr. No	SNPs Position	SNP Nucleotide	Change with	Transition / Transversion
18	14336	A	T	Transversion
19	14360	T	C	Transition
20	14442	A	G	Transition
21	14459	T	C	Transition
22	14495	T	C	Transition
23	14498	A	G	Transition
24	14510	G	A	Transition
25	14514	G	A	Transition
26	14516	A	G	Transition
27	14522	G	A	Transition
28	14525	C	T	Transition
29	14547	T	C	Transition
30	14553	T	C	Transition
31	14576	G	A	Transition
32	14585	C	T	Transition
33	14591	T	C	Transition
34	14625	A	G	Transition
35	14630	A	G	Transition
36	14651	G	A	Transition
37	14744	C	T	Transition
38	14750	C	G	Transversion
39	14793	A	G	Transition
40	14818	A	G	Transition
41	14885	C	T	Transition
42	14963	G	A	Transition
43	14966	G	A	Transition
44	14969	T	C	Transition
45	14981	A	G	Transition
46	14991	C	T	Transition
47	14993	A	T	Transversion
48	15002	C	T	Transition
49	15005	C	T	Transition
50	15008	C	T	Transition
51	15026	A	C	Transversion
52	15033	G	A	Transition
53	15048	A	T	Transversion
54	15051	T	C	Transition
55	15057	C	A	Transversion
56	15060	G	A	Transversion
57	15074	C	T	Transition
58	15080	T	A	Transversion

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Sr. No	SNPs Position	SNP Nucleotide	Change with	Transition / Transversion
59	15083	A	G	Transition
60	15089	A	G	Transition
61	15113	C	T	Transition
62	15119	C	T	Transition
63	15122	A	G	Transition
64	15134	G	A	Transition
65	15140	A	C	Transversion
66	15143	T	C	Transition
67	15147	T	A	Transversion
68	15170	A	C	Transversion
69	15179	C	T	Transition
70	15185	T	C	Transition
71	15194	T	C	Transition
72	15218	T	C	Transition
73	15236	T	C	Transition
74	15242	A	C	Transversion
75	15253	C	T	Transition
76	15262	C	T	Transition
77	15266	T	C	Transition
78	15268	G	A	Transition
79	15278	T	C	Transition
80	15337	A	G	Transition
81	15429	A	C	Transversion
82	15472	A	C	Transversion
83	15540	C	T	Transition
84	15541	C	T	Transition
85	15552	C	T	Transition
86	15558	A	G	Transition
87	15566	G	A	Transition
88	15596	T	C	Transition
89	15614	C	T	Transition
90	15620	C	T	Transition
91	15629	A	G	Transition
92	15634	G	A	Transition
93	15635	T	C	Transition
94	15660	G	A	Transition
95	15673	T	C	Transition
96	15675	C	T	Transition
97	15676	A	G	Transition
98	15687	T	C	Transition
99	15689	C	T	Transition

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Sr. No	SNPs Position	SNP Nucleotide	Change with	Transition / Transversion
100	15697	G	A	Transition
101	15708	G	A	Transition
102	15726	G	A	Transition
103	15742	C	T	Transition
104	15745	A	G	Transition
105	15747	G	A	Transition
106	15761	G	A	Transition
107	15769	G	A	Transition
108	15795	A	G	Transition
109	15796	T	C	Transition
110	15805	T	C	Transition
111	15808	G	A	Transition
112	15809	T	C	Transition
113	15810	A	G	Transition
114	15811	C	T	Transition
115	15820	T	C	Transition
116	15831	C	T	Transition
117	15833	A	G	Transition
118	15841	G	A	Transition
119	15850	T	C	Transition
120	15860	A	G	Transition
121	15862	C	T	Transition
122	15868	T	C	Transition
123	15871	A	G	Transition
124	15885	G	T/C	Transversion
125	15891	C	T	Transition
126	15894	C	T	Transition
127	15896	G	A	Transition
128	15907	A	G	Transition
129	15909	A	G	Transition
130	15911	G	A	Transition
131	15918	G	A	Transition
132	15928	T	C	Transition
133	15945	T	C	Transition
134	15948	T	C	Transition
135	15962	A	G	Transition
136	15963	T	C	Transition
137	15966	A	G	Transition
138	15967	T	C	Transition
139	15971	A	G	Transition
140	15972	T	C	Transition

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Sr. No	SNPs Position	SNP Nucleotide	Change with	Transition / Transversion
141	15973	T	C	Transition
142	15974	T	C	Transition
143	15975	C	T	Transition
144	15976	T	C	Transition
145	15979	C	T	Transition
146	15980	G	A	Transition
147	15981	G	A	Transition
148	15982	C	T	Transition
149	15990	A	G	Transition
150	15992	T	G/C	Transversion
151	15998	T	C	Transition
152	15999	T	C	Transition
153	16000	A	G	Transition
154	16001	C	T	Transition
155	16004	C	T	Transition
156	16007	A	G	Transition
157	16008	T	C	Transition
158	16009	T	C	Transition
159	16017	G	A	Transition
160	16020	A	G	Transition
161	16025	G	A	Transition
162	16026	G	A	Transition
163	16035	C	T	Transition
164	16036	A	G	Transition
165	16038	T	C	Transition
166	16040	T	C	Transition
167	16041	T	C	Transition
168	16043	C	T	Transition
169	16046	A	G	Transition
170	16051	C	A	Transition
171	16052	G	A	Transition
172	16064	C	T	Transition
173	16069	T	G	Transversion
174	16071	A	G	Transition
175	16081	T	C	Transition
176	16112	T	C	Transition
177	16143	A	T	Transversion
178	16147	A	C	Transversion
179	16148	C	T	Transition
180	16149	C	T	Transition
181	16158	C	A	Transversion

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Sr. No	SNPs Position	SNP Nucleotide	Change with	Transition / Transversion
182	16186	T	G	Transversion
183	16205	A	T	Transversion
184	16211	C	T	Transition
185	16230	C	T	Transition
186	16263	A	G	Transition
187	16288	A	G	Transition
188	16323	C	G	Transversion
189	16361	C	T	Transition
190	16367	G	C	Transversion
191	16374	A	G	Transition
192	16423	C	G	Transversion
193	16424	A	G	Transition
194	16433	A	G	Transition
195	15438	T	C	Transition
196	16445	C	T	Transition
197	16456	T	C	Transition
198	16458	T	C	Transition
199	16464	G	C	Transversion
200	16475	T	C	Transition
201	16483	C	T	Transition
202	16493	T	C	Transition
203	16512	G	A	Transition
204	16518	T	C	Transition
205	16542	T	C	Transition
206	16614	G	A	Transition
207	16615	T	C	Transition
208	16637	A	G	Transition
209	16639	T	A	Transversion