

Supplementary material

Table S1: The results of the naked eye detection of 47 hybrid Kazakh sheep and the corresponding sequencing results

Number	Sample number	Naked eye observation	Sequencing result
1	5	++	++
2	S2	BB/B+	B+
3	24	++	++
4	26	BB/B+	B+
5	S8	BB/B+	B+
6	21	BB/B+	BB
7	390	++	++
8	S3	++	++
9	806	++	++
10	9	++	++
11	S4	BB/B+	BB
12	180	BB/B+	BB
13	28	++	++
14	1525-1	++	++
15	2113	++	++
16	17-2	++	++
17	S1	BB/B+	B+
18	153	BB/B+	B+
19	31	++	++
20	194	++	++
21	2079	BB/B+	BB
22	2087-1	BB/B+	BB
23	11	++	++
24	1398	BB/B+	BB
25	2792-2	++	++
26	4	BB/B+	B+
27	15-1	BB/B+	B+
28	1799	++	++
29	3	BB/B+	B+
30	29	++	++
31	7	++	++
32	1147	++	++
33	103	BB/B+	BB
34	14	++	++
35	18	++	++
36	104	BB/B+	BB
37	2087-2	BB/B+	BB
38	1	BB/B+	BB

Table S1: continued

Number	Sample number	Naked eye observation	Sequencing result
39	22	++	++
40	1231	++	++
41	19	++	++
42	25	++	++
43	2	BB/B+	B+
44	10	BB/B+	B+
45	8	BB/B+	B+
46	16	++	++
47	23	++	++

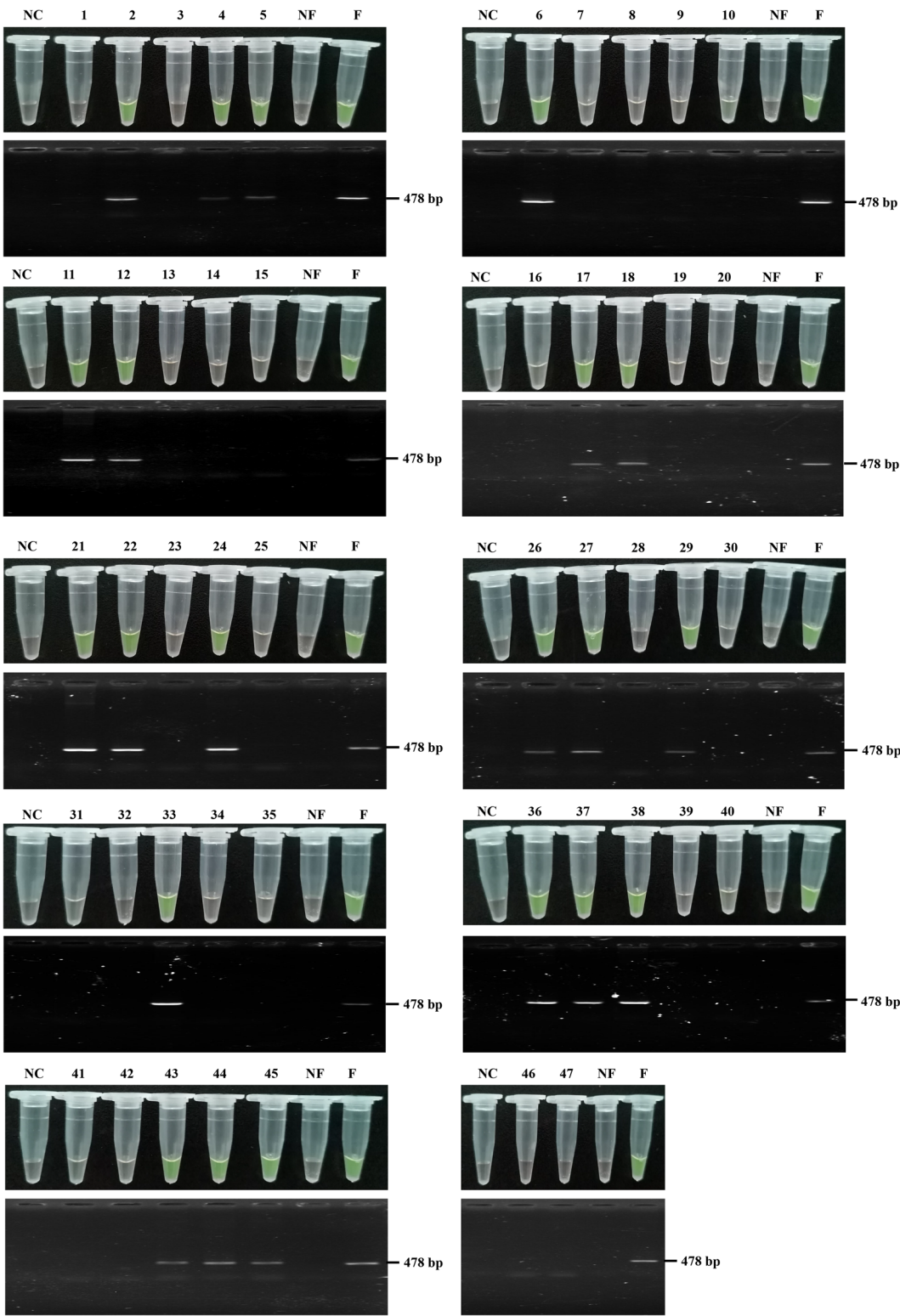


Figure S1: The results of visual detection and electrophoresis verification of the 47 hybrid Kazakh sheep.

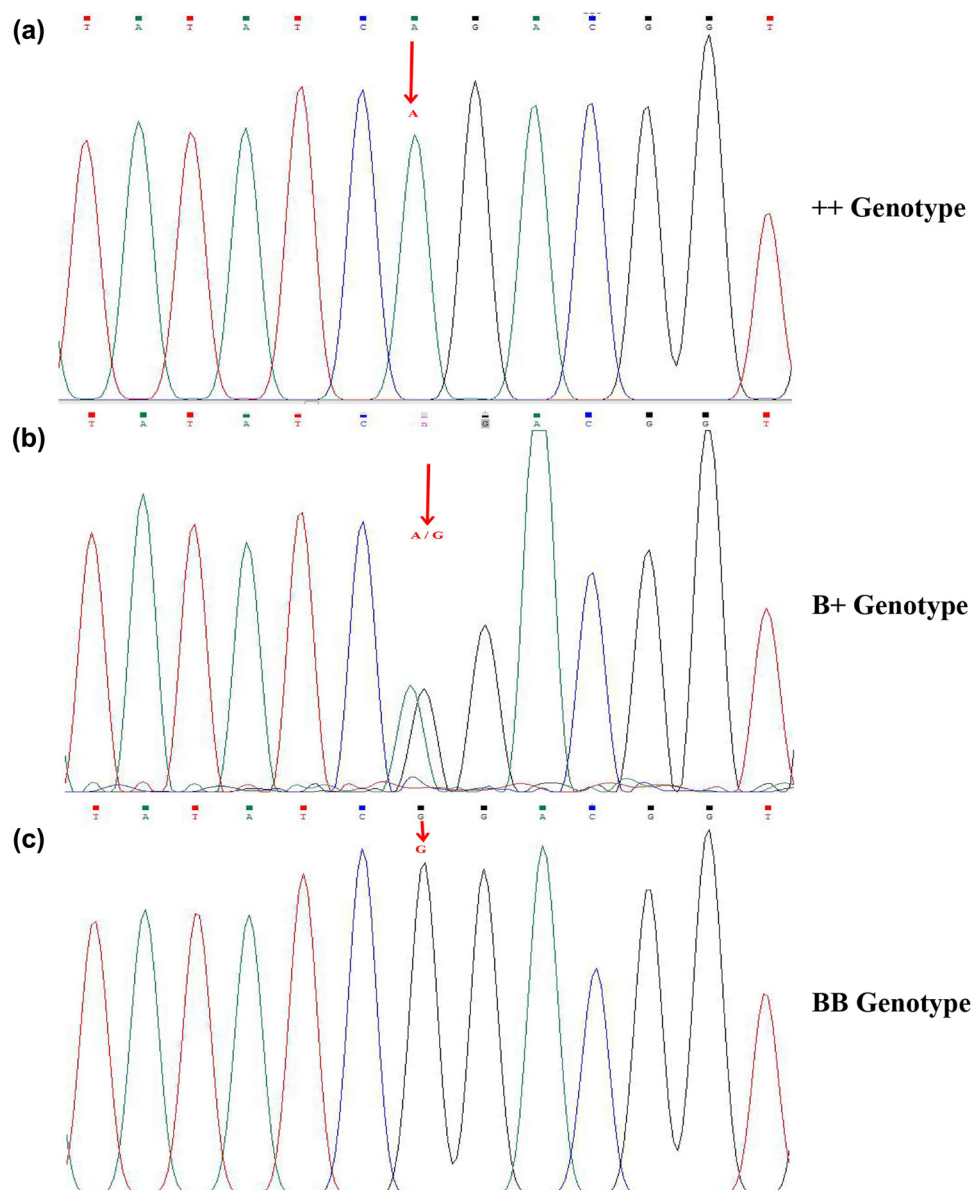


Figure S2: Sequencing results of three different genotypes. (a) ++ genotype. (b) B+ genotype. (c) BB genotype.