**Table S1: Characteristics of the sheep microsatellite markers**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Nucleotide** | **Number of** | **Hybridization** | **Multiplex** | **Theoretical** |
| **Microsatellite** | **Primers** | **Sequences of primers** |  |  |  |  |  |
|  |  |  | **pattern** | **chromosome** | **temperature (°C)** |  | **size** |
|  | Forward | GAAGTCATTGAGGGGTCGCTAACC |  |  |  | 1 |  |
| OarJMP58 |  |  | Di | OAR 26 | 58 | 145-169 |
|  | Reverse | CTTCATGTTCACAGGACTTTCTCTG |  |  |  |  |  |
|  |  |  |  |  |  | 2 |  |
|  | Forward | GGGTGATCTTAGGGAGGTTTTTGGAGG |  |  |  |  |  |
| MAF214 |  |  | Di | OAR 16 | 58 | 174-282 |
|  | Reverse | AATGCAGGAGATCTGAGGCAGGGACG |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Forward | GGAAGCAATGAAATCTATAGCC |  |  |  |  |  |
| ILSTS5 |  |  | Di | OAR 7 | 55 | 3 | 174-218 |
|  | Reverse | TGTTCTGTGAGTTTGTAAGC |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Forward | AAAGGCCAGAGTATGCAATTAGGAG |  |  |  |  |  |
| MAF65 |  |  | Di | OAR15 | 60 | 2 | 123-127 |
|  | Reverse | CCACTCCTCCTGAGAATATAACATG |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Forward | TTCATCTCAGACTGGGATTCAGAAAGGC |  |  |  |  |  |
| OarFCB193 |  |  | Di | OAR 11 | 54 | 3 | 174-218 |
|  | Reverse | GCTTGGAAATAACCCTCCTGCATCCC |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Forward | CCCTAGGAGCTTTCAATAAAGAATCGG |  |  |  |  |  |
| OarFCB304 |  |  | Di | OAR 19 | 56 | 3 | 150-188 |
|  | Reverse | CGCTGCTGTCAACTGGGTCAGGG |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Forward | GCTTGCTACATGGAAAGTGC |  |  |  |  |  |
| ILSTS11 |  |  | Di | OAR 9 | 55 | 1 | 256-294 |
|  | Reverse | CTAAAATGCAGAGCCCTACC |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Forward | GTTCGTACTTCTGGGTACTGGTCTC |  |  |  |  |  |
| MCM140 |  |  | Di | OAR 6 | 60 | 1 | 167-193 |
|  | Reverse | GTCCATGGATTTGCAGAGTCAG |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Forward | TGCAAGAAGTTTTTCCAGAGC |  |  |  |  |  |
| SRCRSP1 |  |  | Di | OAR 13 | 54 | 1 | 116-148 |
|  | Reverse | ACCCTGGTTTCACAAAAGG |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Forward | GCTGAACAATGTGATATGTTCAGG |  |  |  |  |  |
| OarCP34 |  |  | Di | OAR 3 | 50 | 4 | 112-130 |
|  | Reverse | GGGACAATACTGTCTTAGATGCTGC |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Forward | CTATATGTTGCCTTTCCCTTCCTGC |  |  |  |  |  |
| OarCB226 |  |  | Di | OAR 2 | 60 | 3 | 119-153 |
|  | Reverse | GTGAGTCCCATAGAGCATAAGCTC |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Forward | CACGGAGTCACAAAGAGTCAGACC |  |  |  |  |  |
| MAF70 |  |  | Di | OAR 4 | 60 | 4 | 124-166 |
|  | Reverse | GCAGGACTCTACGGGGCCTTTGC |  |  |  |  |  |