**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 |   |  |   |  |   |