

Figure S1: Sequences of horned and polled sheep

Sequences shown in black font correspond to **OAR 10: 29456001-29457918** (sheep genome assembly version 3.1). The precise location (breakpoint) of the insertion is indicated with a blue vertical bar and submitted to **dbVar** (<http://www.ncbi.nlm.nih.gov/dbvar>) under accession **nsv1079043**. The segments which are identical in the horned and polled sheep are shown in black. The sequence of the 1.8 kb insertion in the polled sheep is shown in blue; the annotated *EEF1A1-like* gene is shown underlined. At the position of the red star an additional segment of 83 bp is present in the reference sequence and which is annotated as intron of the *EEF1A1-like* gene. This 83 bp DNA segment was shown to be absent in the sequenced polled sheep.

Horned sheep:

GCCACGCTAGAATTAGATGTCATGAGTGTTTTTTATTTAATGACAGTG | **CAACTCAATTTAAG**
AGCAGACTGTGCAGGGCCAAGGGG

Polled sheep:

GCCACGCTAGAATTAGATGTCATGAGTGTTTTTTATTTAATGACAGTG | **CAGCTTTTTCGCAA**
CGGGTTTTGCCGCCAGGACACAGGTGTCGTGAAAACCACCGTTAAACCTAAGCCAAAATGGGA
AAGGAGAAGACCCACATCAACATCGTTGTCATTGGGCACGTAGATTCAGGGAAGTCTACCAC
GACTGGCCATCTGATCTACAAATGTGGCGGGATCGACAAGAGAACAATTGAAAAGTTTCGAGA
AGGAGGCAGCCGAGATGGGAAAGGGCTCCTTCAAATATGCCTGGGTCTTGGACAAACTGAAA
GCTGAACGTGAGCGTGGTATTACCATTGATATCTCCCTGTGGAAGTTTGAGACCAGCAAGTA
CTATGTTACCATCATTGATGCCCCAGGACACAGAGACTTCATCAAAAACATGATTACAGGCA
CATCCCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTGGTGAATTTGAAGCCGGT
ATCTCCAAGAACGGGCAGACCCGTGAGCATGCCCTTCTGGCTTACACCCTGGGTGTGAAACA
ACTAATTGTTGGCGTTAAACAAAATGGATTCTACTGAGCCACCCTATAGCCAGAAGAGATACG
AGGAAATTGTTAAGGAAGTCAGCACCTACATTAAGAAAATTGGCTACAACCCCGACACAGTA
GCATTTGTGCCAATTTCTGGCTGGAATGGTGACAACATGCTGGAGCCAAGTGCTAATATGCC
ATGGTTCAAGGGATGGAAAGTCACCCGTAAGGACGGCAATGCCAGTGGAAACCACCCTGCTTG
AAGCTCTGGATTGCATCCTGCCACCAACTCGCCAACTGACAAAACCCTTGCCTTTCCTCTC
CAGGATGTCTATAAAATTGGTGGTATTGGTACTGTACCTGTGGGTCTGTGGAGACTGGTGT
TCTCAAACCTGGCATGGTGGTCACCTTTGCTCCAGTCAATGTAACAACCTGAGGTGAAGTCTG
TAGAAATGCACCATGAAGCACTGAGTGAAGCCCTTCTGGGGACAATGTGGGCTTCAATGTC
AAGAACGTGTCTGTCAAAGATGTCCGTCTGGCAATGTGGCTGGTGACAGCAAAAATGATCC
ACCCATGGAAGCTGCTGGCTTACAGCTCAG*GTGATTATTTTGAACCATCCAGGCCAAATC
AGTGCTGGATATGCACCTGTGCTGGATTGTACACAGCTCACATTGCTTGAAGTTTGCTGA
GCTGAAGGAGAAGATTGATCGTCTGTTCTGGGAAAAGCTGGAAGATGGCCCTAAATTTCTTGA
AATCTGGTGACGCTGCCATCGTTGATATGGTTCTGGCAAGCCTATGTGTGTGCGAGAGCTTT
TCTGATTATCCTCCCCTGGGCCGTTTTGCTGTGCGTGACATGAGACAGACAGTCGCTGTGGG
TGTCATCAAAGCAGTGGACAAGAAGGCAGCTGGAGCTGGCAAGGTCACCAAGTCTGCCCAGA
AAGCTCAGAAGGCTAAAATGGATGTTATCCCCAATACCTGCCATCCAGTATTAATCAGTGGT
GGAAAAACGGTCTCAGAAGTGTGTTGCTCAATTGGCCATTTAAGTTTAATAGTAAAAGACTG
GTTAATGATAACAATGCATCGTAAAACCTTCAGAAGGAAAGGAGAATGTTTTTGTGGACCAT
ATGTTTTGTGTGTGGCAGTTTAAGTTATTAGTTTTTAAAATCAGTACTTTTTAATGAAAACA
ACTTGACCAAAAATCTGTACAGAATTTGAGACCCATTAAAAAAAGTTTAATGAGAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAATGACAGTG | **CAACTCAATTTAAGAGCAGACTGTGCAGGG**
CCAAGGG