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Supplementary Materials

Detection of Novel Variations Related to Litter Size in *BMP15* Gene of Luzhong Mutton Sheep (*Ovis aries*)

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Table S1. Sequence of the entire ORF region of the BMP15 gene in Luzhong mutton sheep.

Gene	Sequence of the entire ORF region of the BMP15 gene in Luzhong mutton sheep
BMP15(Ovis aries)	ATGGTCCTCCTGAGCATCCTTAGAATCCTTTGGG- GACTGGTGCTTTTTATGGAACATAGGGTCCAAATGACACAGGTAGGGCAGCCCTC- TATTGCCCACCTGCCTGAGGCCCCTACCTTGCCCCTGATTCAGGAGCTGCTAGAAGAA- GCCCCTGGCAAGCAGCAGAGGAAGCCGCGGGTCTTAGGGCATCCCTTACGGTATATGCTG- GAGCTGTACCAGCGTTCAGCTGACGCAAGTGGACACCCTAGGGAAAACCGCACCATT- GGGGCCACCATGGTGAGGCTGGTGAGGCCGCTGGCTAGTGTAG- CAAGGCCTCTCAGAGGTGAGTTATCATACTATATTGTTCTGGTGGGAGGGGGGGA- GAAAATGGGGAAGAAAAGTGTAGAAAAAAGTGGATCTGTCAG- TTTTCTGTCAGGCTTCACATTGCCTACAGGGTAGGTGGTTTTCAAAAGATGGCACCCTTGGGA- GAACCTGGCTCCAAATTTGCTTCCCTTTAGGGCTCCAATTTAAGAACAGATTGCCTT- GGGGCCTCCCTGAGGACTTTCTCCCAGGCCCCAGGGCAACTCATT- GATGTGTCAGCTCCTAGCTTTCAAAGAAAGTTTTAATGCTTATTATATCAC- TGAAAATTATAACTGAGAAATACTCATTATGTTCTGTGGAGGGCTGTTTGTCTT- GTTTTATTCTTAGAAGACAAAAGGTACAGGATGTTGAGTTGAG- GAAATTTACAAGGCTTCAGAAAGGACAGAAACAGGCTCACACCTGAGAG- TCTGTTATTGTATTTAATCCTTAATGA- TAGGGACTCTCCTTAGCTGTCCTGAAAGGCTTAGCCTGGTTTTTAAAGAAAAGGGAAACAGA- GAGCAAAGTTAAATGACTTGCAGAGGTCACAAGGATGGGGTGGCAGAGGCAGGAGTT- GAGCTTCAAGTCTGTCTGATTTTATAGTCTGTCCATAACTACTTAAGTGTTTTGAATGTCAT- ACCCTGATATCCTTGTACACGAAAGCAGTTTTTCTGTTTAGACTATGTTGCTAGTTT- GGGTTTGTGGTACCAAATGTATTTTGGAATTTTCTTTGTTTCCCTCATAGTT- GCTTCTGCTTTAAACATCTTCATTAGAGACTGATCTAGGGCAATAGTGGGCTTATGCAGTG- CAGGGTTCTCTAGGGAATGAAGAAAGCCATCAATTTCAAGGAAATCTTGGGAAC- CTGGTGAAATCAATCTTAAGCCTTTGCTAGTCTCAAAGATGACACCAGACATGATTTAC- CTCCCTCCTCCAAGTAAAACAACCACCATTCCCTTAAGCTAAACTTTAGTGTGTGCTTAC- CATGTGCCGGGTATTAGGCACTGTACTTTTACAAACATTATCTTCCTTAATCCTCCCCAA- TATCATATGAAGTAGGTGTGTGTGCGAACTCAGTTGTATCTGATTCTTTGTGACCCCATGGAC- TATACCTGCCAGGCTCCTCTGTCCATGGAACTTTCCAGGCAAGAGTACTGGCGTGGGTT- GCCATTTCCTCCTCCAGGG- GATCTTCCCATCCCAGGGATCAAACCCACATCTTCTGTGTTTCCTGCATTGGCAAGAGGAT- TCTTTACTACTGCTCCACTATGGAATACTATGAATATACCCATTATATAGGTGAA- GAAAATGAAGCTCAGTGTAACACAGCTAGTAATTAATAGAGCTGGAT- TTCTAACCCGGGCTTTCAGGCTTCAGAGCCTGTGCTTTTAATTACCCTGCTGAGCTGACTGCT- TAACAGACTTTAATTGAGCACCAAGCACTGTGTTGGGGTTGGGTATAAAAAGGCAAA- TAACTGCTCGAGGAGCCCCCACTATAGTAGAATGGATATATAAGTAACAACATAATGGTGG- TACAGCACAGCAAATGCTTTGAAAAGGATAAACAGTAGGATTCCTGGGGCTCCAAGAA- GAAATGGGTTGCTACTTAGGGCAAGGAGAGGGAAATGCTGAAATAGTTGAAAGGCCTCATT- GGAGAGGCAGCATTTGAGCCAGACTTTGCAGAAGGAGTAAAGAGACTATGGATA- CAGGGAGGGAAGTGCATTCTGATTGAGGAAAAAGAAGATAACTTGATAAGGTTGGAGAT- TCACTCGACAAGTATTTATTTAGCAACTGTTAAGTGCTAGGCATTGTTCTAGGTGTT- GGAATGTGATCAAGATGGGCACGGCTCTCTGGGTGAGACAAGTAAGTAAACATGGATAGTAG- TAAATTGTGGTAAATGCTACCAAAGAATGAAATAGGTGGTTCTGATAGAGAATAGCAAA- GAAATCTTCCCTTCGCATGGGATTGTCAGTGAAGGCATGTTTGAAGAGGTGACATTT- GAGCTGAGGTCTGTAAGGTAAGAAGCTTGGCATGAGAAGAGAGGAGA- GAATTCTGATCTAGGCAGAGGGAACAACATGTACAAAGGCCTAAAGGTGGAAACAAGTACTT- GAAGAATAGAAGGAAGATCAGGATGGTTGGAGCCTAGTGAGATTGTAGAGAGTCGTGGGA- TATGAAACTGATGAGGCTCAGGGATGCAGTGGTCATTACAAGCGATCTGGATTTCAC- TCATAAGCTGCATAAGTCAATTCTGTACAGATGATATGAGGCTAGAAAGTAGAATGTCTA- GAATTAGGCCAGTATCTTGATCTGACCATGGGACATACTGG- TATCTAGGGACTCTGAAAAGGATCCAGAAATGGATGACAAGAGAGTT- GGGTCTGATCATTCCATCAGAGAGATGATCCAGCTGAATCAAGCTTGCTTTGAGAGC- TATTCCAGGTTCAATCGCACAGGATGTGTGAGTCAGACATTTCCCTGAAAAGTTCTGAG- CAGACCCTTCCTGGCCCTGATCCTTAGCAACCCCACCCTGCTTCAGGAAA-

TATGTGATGTCAGGGTCTGAAAGGAAAGGGCAGTTCCTCACCAGACTGCCTGCTAGAGAT-
TCGGTTTAGATTCCTTTTCAGGCAGGGTGGGGCAGATGTATGGGTGGGTGTCTTGGAAAGAT-
TATTACAGGATGGGAGTATGGAGTAACTCGAGAAAGCAATTACAAGCCTGGCTTGAGCTTT-
GTCTGAATGATATCCAAGTACCCCAAACTTGAGGGTGTATTAAGCATGAGTTGGAACCTGAAC-
TAAAAAAAAAAAAATTGATGTATGGTTTCACTCATGTGGAA-
TATAAAAACAAAAATTAAAAACTCAAACAGATCAGATTAGTGTTTACCAG-
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TAACAGATGATGGTAACTAAGCTTGTGGTGGTGATCACTCTGTAGTGTATACAGATGTTGAAT-
TATGAATTATGATTATGAATTTTGCACCTGAAACTTGGATA-
CATAACTAAAAAAATCCTGATGCATCAAAACATTCAAGAGCTTCTATGTTGAACATCCCAA-
GCTTACTGAATTCCAGGTTCATGGATTCAGTGGAGAAGGAAAATTAGGTAGATAA-
TATGTAAATTAGCATGGCCATGGTTAGTGACTGGACATGGAAAAACAGACTGGTTCTAAA-
TAGGAAAAGGAGTACGTCAAGGCTGTATATCGTCACCCTGCTTATTTAACTTATATGCAGAG-
TACATCATGAGAAACACTGGGCTGGAAGAAACACAAGCTGGAATCAAGATTGCCGGGACAAA-
TATCAATAACCTGAGATATGCAGATGATACCACCCTTATGGCAGAAAGTGAAGGGGAACTAAA-
GAGCCTCTTGATGAAAGTGAAAGAGGAGAGTGAAAAAGTTGGCTTAAA-
GCTCAACATTCAGAAAACTAAGATCATGGCATCAGGTCCCATCACTTCATGGCAAA-
TAGATGGGGAAACAGTGACAGACTTTATTTTTCTGGGCTCCAAAATCACTG-
CAGATGGTGACTGCAGCCATGAAATTAAAATAAATAAGACACTTGCTCCTT-
GGAAGGAAAGTTATGACCAACCTAGATTGCATATTAAAAAGCAAAGACATTATTTT-
GCCAACAAAGATCCATCTAGTCAAGGCTATGGTTTTTCCAGTAGTCATGTATGGATGTGA-
TAGTTGGACTATAAAGGAAGCTGAGCGCTGAAGAATTGATGCTTTTGGACTGTGGTATTGGA-
GAAGACTCTTGAGAGTCCCTTGGACTGCAAGGTGATCCAACCAGTCCATCCTGGGG-
GAAATCAGTCCCAGGTGTTCATTGGAGGGACTGATGTTGAAGCTGAAACTCCAATACTTT-
GGCCACCTGATGTGAAGAGCTGACTAATTGGAGATGACCCTGATGCTGTGAAAGATTGGGGG-
CAGGAGGAGAAGGGGACAACAGAGGTTGAGATGGTTGGATGGCATCAC-
CAACTCAATGGACATGGGTTTGGGTGAACTCCAGGAGTT-
GGTGATGGACAGGGAGGCCTGGCGTGTTTTGGTTCATGGGGTCACAAAGAGTCGAACAC-
GACTGAGCAACTGAACTGAACTGATGGTTAGTGATAGGTGAA-
GATGACAGAAGGGTTTTTCTTGCTATTGACCTTTTTTGTAATCGTTGCTCTTGACCTTT-
GCCAGGAGAGGGCGCAGAAGGTCAGAGCACTGCAGGTCCTGCTTTTTAACGCTTTGGCCAC-
TAGGTGTCAGCATCACAGTTTGGATTAAAATAATCACTTTGTAGCTCAGCTGGTAAA-
GAATCCGCCTGCAATGCGAGAGACCTCAGTTCGATCCCTGGGTTGGGAAGATCGCTGGA-
GAAGGGAAAGGCTACCCACTCCAGTATTCTGGCCTGGAGAATTCTATGGACTG-
TATAGTCCATGAGGTCGCAAAGAGTCAGACAAGGCTGAGCGACTTTCACTTTCAAAAGTT-
GCATCTTTTAAGTAGACTTTTTAGTTGAGGTCATTTATATGACTGGGCCTTGTTGAAAACGG-
TATTTACAATGAATGGGGTAAATGAAGAATCATTTCCAGTAAGGAATGGAAAAGAGGGA-
GATTGAGGATTAAGGGAGAACCTGCCCAATAATGGAATAGCTGCTCAAGAAGAAATTCAAA-
TAGAAAGCAAAGTATTAAATACCTGTCCCAACTAGGAAAAATTATTTTGTGG-
CATCTCCAACCCAGATTTGAAGCAATAGCAGACCATACCCCCCAA-
TATTGGACTGTCACCCTAAAGCTGCCACTATATAGTGATATAGCATGAGGATTTATTAATTCG-
TATGTTTCAATGATCCTCTTAATTGGTCACCTTTTTAATAGTCAGCTAAA-
TAATACAATATATACAGACAGTTCTGTATTTGAGGTGTTTTTCTCCGTCTAGGGGTATGAG-
TGATCTAAAAATGAGCCACAATTTGTCATCTTAAGGGAAAAAGACTT-
GGACTCAAATCTTTATTCTAACAAACACTGGCTTGTGTGTCCTCTGG-
CATAGCTTCTCTGAGCTTCAGTTTCCTCGTCTGCAAAATGGGAATAGCAAC-
TATCTCATAAGGCTATTGTGGATTCAAGAGCAAATGCATGTAAAGCATCTAATACATTATA-
TAAGTGCTCAATAGATCGCTATTATGATCTTAAATTCATCTCAAGGCTGCTTGTCAGTTT-
GTACTGAGCAGGTCTGTTAGAGAGACTAAGGCTAGGATATAAGAAGCTAACGCTTTGCTCTT-
GTTCCCTCTTACTAATGCAGGCTCCTGGCACATACAGACCCTGGACTTTCCTCTGAGAC-
CAAACCGGGTAGCATACCAACTAGTCAGAGCCACTGTGGTTTACCGCCATCAGCTTCAC-
CTAACTCATTCCCACCTCTCCTGCCATGTGGAGCCCTGGGTCCAGAAAAGCCCAAC-
CAATCACTTTCCTTCTTCAGGAAGAGGCTCCTCAAAGCCTTCCCTGTTGCCCAAAACTT-
GGACAGAGATGGATATCATGGAACATGTTGGGCAAAAGCTCTGGAATCACAAGGGGCG-
CAGGGTTCTACGACTCCGCTTCGTGTGTCAGCAGCCAAGAGGTAGTGAGGTTCTTGAG-
TTCTGGTGGCATGGCACTTCATCATTGGACACTGTCTTCTTGTTACTGTATTTCAATGACAC-
TCAGAGTGTTCAGAAGACCAAACCTCTCCCTAAAGGCCTGAAAGAGTTTACAGAAAAA-

GACCCTTCTCTTCTCTTGAGGAGGGCTCGTCAAGCAGGCAGTATTGCATCG-
GAAGTTCCTGGCCCCTCCAGGGAGCATGATGGGCCTGAAAGTAACCAG-
TGTTCCCTCCACCCTTTTCAAGTCAGCTTCCAGCAGCTGGGCTGGGATCACTGGATCATT-
GCTCCCCATCTCTATACCCCAAACTACTGTAAGGGAGTATGTCCTCGGGTACTACAC-
TATGGTCTCAATTCTCCCAATCATGCCATCATCCAGAACCTTGTCAGTGAGCTGGTG-
GATCAGAATGTCCCTCAGCCTTCCTGTGTCCCTTATAAGTATGTTCCCATTAG-
CATCCTTCTGATTGAGGCAAATGGGAGTATCTTGTACAAGGAGTATGAGGG-
TATGATTGCCCAGTCCTGCACATGCAGGTGACGGCAAAGGTGCAGCTAGCTCAGGTTT-
GCCCAAGAAATTCGAAAAGGATTTATAATAAATACTGTTAAATCTGAGAG-
TGCTCAACCCAAGTGCTCTACCCAATCTGTAGATTCTATTCCTTGCCTTCAGCATT-
GTACTTTAAGTCTTCTTCCCCTATTTATGAGTGCCTCACTTTATAAACAGTTCTGATGCCAAA