

## Supplementary Data

A141R	GATGCTGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
PM4808F	GATGCTGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
A141F	GATGCTGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
PM4913R	GATGCTGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
PM4913F	GATGCTGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
A291R	GATGCTGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
A291F	GATGCTGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
A66F	GATGCCGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
A1013F	GATGCCGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
A185R	GATGCNGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
A139R	GATGCNGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
A139F	GATGCNGAGACAGTGTGAGGCCAGACTGTGAGTCCCCCACTGTGACCTGAGCCCCGAG	60
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A141R	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
PM4808F	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
A141F	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
PM4913R	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
PM4913F	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
A291R	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
A291F	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
A66F	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
A1013F	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
A185R	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
A139R	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
A139F	CCCACCCCAGCCCCGGGTTCCACTCTTCACCTGCTCCTGTGGCACTGACTTCGCAATG	120
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A141R	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
PM4808F	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
A141F	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
PM4913R	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
PM4913F	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
A291R	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
A291F	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
A66F	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
A1013F	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
A185R	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
A139R	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
A139F	CCAATTACAGCCATCTGCTCCTCCAGGGAACCTGGGACCCCTGGCTCCAGGGTCCCC	180
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A141R	AAGCTATCCAG 192	
PM4808F	AAGCTATCCAG 192	
A141F	AAGCTATCCAG 192	
PM4913R	AAGCTATCCAG 192	
PM4913F	AAGCTATCCAG 192	
A291R	AAGCTATCCAG 192	
A291F	AAGCTATCCAG 192	
A66F	AAGCTATCCAG 192	
A1013F	AAGCTATCCAG 192	
A185R	AAGCTATCCAG 192	
A139R	AAGCTATCCAG 192	
A139F	AAGCTATCCAG 192	
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**Figure1:** Multiple sequence alignment of *MISRII* exon3 of animals in Figure 2. The PMDS mutation is highlighted. N represents the CT heterozygous condition. F and R represent forward and reverse reads respectively.