

Supplementary Table S1. Oligonucleotides for methyl-specific PCR for the promoters of the succinate dehydrogenase genes *Sdh1-2*, *Sdh2-3*, *Sdh3-1*, *Sdh4*

Gene		Distance	M or U	5'-oligonucleotide-3'
<i>Sdh1-2</i>	I	-57	forward M	AATATATTTTAAATTGCA
			reverse M	TAATTTAAGGTTAGAGG
			forward U	AATATATTTTAAATTACA
			reverse U	TAATTTAAGGTTAGAGG
	II	-115	forward M	TAACCCACCTTACAAGCA
			reverse M	TAATTTAAGGTTAGAGG
			forward U	TAACCCACCTTACAAACA
			reverse U	TAATTTAAGGTTAGAGG
	III	-307	forward M	CAAATAAAACTATTGCT
			reverse M	TAATTTAAGGTTAGAGG
			forward U	CAAATAAAACTATTACT
			reverse U	TAATTTAAGGTTAGAGG
<i>Sdh2-3</i>	I	-109	forward M	TTTATACGATCGAGTTAGTACG
			reverse M	AAAATATCTTTAAATAAATCTTAAACC
			forward U	TTTTTTATATGATTGAGTTAGTATG
			reverse U	AAAATATCTTTAAATAAATCTTAAACC
	II	-165	forward M	TTAATAATATCAACAAGCG
			reverse M	TTAGTTATAAATTTTGATTG
			forward U	TTAATAATATCAACAAACG
			reverse U	TTAGTTATAAATTTTGATTG
	III	-205	forward M	AAATCTTCTTTCACCCGCT
			reverse M	TTAGTTATAAATTTTGATTG
			forward U	AAATCTTCTTTCACCCACT
			reverse U	TTAGTTATAAATTTTGATTG
<i>Sdh3-1</i>	I	-506	forward M	TATTTTATGTTTTTATTTTGCGG
			reverse M	TCAAGGGAACGAGTATATCTAAAC
			forward U	TATTTTATGTTTTTATTTGTGG
			reverse U	TTAAGGGAATGAGTATATTAAAT
	II	-454	forward M	TATAATAAGGGTAAGTGAAAGTCGT
			reverse M	TCAAGGGAACGAGTATATCTAAAC
			forward U	TATAATAAGGGTAAGTGAAAGTTGT
			reverse U	TTAAGGGAATGAGTATATTAAAT
	III	-431	forward M	TTTAGAGGGGAGGTGAATAGGCGA
			reverse M	TCAAGGGAACGAGTATATCTAAAC
			forward U	TTTAGAGGGGAGGTGAATAGGTGA

			reverse U	TTAAGGGAATGAGTATATTTAAAT
<i>Sdh4</i>	I	-57	forward M	GATGTTTTTTCGTCGTATTATTTTC
			reverse M	GTATTAGGCGGTTTTAGAGAAGG
			forward U	TGTTTTTTTGTTGTATTATTTTGA
			reverseU	GTATTAGGCGGTTTTAGAGAAGG
	II	-115	forward M	TTTTAAAGTTTTTATTTTTTTTCGA
			reverse M	GTATTAGGCGGTTTTAGAGAAGG
			forward U	TTTTAAAGTTTTTATTTTTTTTGA
			reverse U	GTATTAGGCGGTTTTAGAGAAGG
	III	-307	forward M	AAATTAGATTTAATTAATTCGT
			reverse M	GTATTAGGCGGTTTTAGAGAAGG
			forward U	AAATTAGATTTAATTAATTTTGT
			reverse U	GTATTAGGCGGTTTTAGAGAAGG

Supplementary Table S2. Oligonucleotides for methyl-specific PCR for the promoters of the fumarase gene *Fum1*

Gene		Distance	M or U	5'-oligonucleotide-3'
<i>Fum1</i>	I	-495	forward M	GGGTGGATTTATATAGAGTGGGTC
			reverse M	ACGAATACCTCATACGAAATAACG
			forward U	GGTGGATTTATATAGAGTGGGTTG
			reverse U	CAAATACCTCATACAAAATAACAAA
	II	-524	forward M	AGGGGTATTACGTGTGGGTTTCG
			reverse M	ACGAATACCTCATACGAAATAACG
			forward U	AGGGGTATTACGTGTGGGTTTG
			reverse U	CAAATACCTCATACAAAATAACAAA
	III	-557	forward M	TATTTATGTATAAAATTTCG
			reverse M	ACGAATACCTCATACGAAATAACG
			forward U	TATTTATGTATAAAATTTGT
			reverse U	CAAATACCTCATACAAAATAACAAA

Supplementary Table S3. Oligonucleotides for methyl-specific PCR for the promoters of the NAD-malate dehydrogenase genes *mMdh1* and *mMdh2*

Gene		Distance	M or U	5'-oligonucleotide-3'
<i>mMdh1</i>	I	-365	forward M	CTCCTATAACTATTATCAATATAAAGCA
			reverse M	GATTATTGGTTGAGTAGGAGG
			forward U	CTCCTATAACTATTATCAATATAAAACA
			reverse U	ATTATTGGTTGAGTAGGAGG
	II	-245	forward M	AAATCTAAATAAACAATCGCC
			reverse M	GATTATTGGTTGAGTAGGAGG
			forward U	CATAAATCTAAATAAACAACA
			reverse U	ATTATTGGTTGAGTAGGAGG
	III	-194	forward M	CCGCTAAAAAATAATAGCA
			reverse M	GATTATTGGTTGAGTAGGAGG
			forward U	CCGCTAAAAAATAATAACA
			reverse U	ATTATTGGTTGAGTAGGAGG
<i>mMdh2</i>	I	-634	forward M	GTTTGTGTTGTTGTTGTTATTGTC
			reverse M	TTCCTAACTCCCCTAAAACTCGT
			forward U	TTGTTTGTGTTGTTGTTATTGTTGT
			reverse U	TTTTCCTAACTCCCCTAAAACTCAT
	II	-704	forward M	TGTTTTGTATTTTTTATTATCGA
			reverse M	TTCCTAACTCCCCTAAAACTCGT
			forward U	TGTTTTGTATTTTTTATTATTGA
			reverse U	TTTTCCTAACTCCCCTAAAACTCAT
	III	-803	forward M	TTTTTTCGTTGTTTTTTAGGTCGT
			reverse M	TTCCTAACTCCCCTAAAACTCGT
			forward U	TTTTTTCGTTGTTTTTTAGGTTGT
			reverse U	TTTTCCTAACTCCCCTAAAACTCAT

Note: The minus sign indicates at what distance from the beginning of the first exon of the gene the studied cytosine is located; I, II, III - different groups of primers. Cytosine in each group of primers differed by the presence of methylation (M) or its absence (U).