

Table S1. Genes, primer sequences, and PCR conditions for the qRT-PCR assay.

Gene ID	Gene name			Sequences (5'-3')	
Antioxidant defence signals					
SOD1	CuZn-Superoxide dismutase	F	5'	CACGATGGTGGTCCATGAA	3'
		R	5'	TTCCAGCGTTGCCAGTCTT	3'
SOD2	Mn-Superoxide dismutase	F	5'	ACGTGAACAACCTCAACGT	3'
		R	5'	AGTCACGTTTGATGGCTTC	3'
CAT	Catalase	F	5'	GTTCGCTTCTCCACTGTT	3'
		R	5'	GGCCATAGTCAGGATCTT	3'
GST	Glutation-S-transferase	F	5'	TTCCCTCTGCTAAAGGCC	3'
		R	5'	CTTCCTCTGGCTGCCAGG	3'
DNA repair signals					
EXO1	Exonuclease 1	F	5'	GCAACTTCTTCGTGAGGGA	3'
		R	5'	AGGAAGGTATTGTTGGCCC	3'
XRCC3	X-Ray Repair Cross-Complementing Gene 3	F	5'	GGTCGAGTGACAGTCCAA	3'
		R	5'	TGCAACGGCTGAGGGTCTT	3'
SMUG1	Single-strand-selective monofunctional uracil-DNA glycosylase 1	F	5'	AATGATGAGCTGAGGCAA	3'
		R	5'	GCGTATTCCACAGGGTTGT	3'
MLH1	mutL homolog 1	F	5'	GAAATATCATTGCTCACGC	3'
		R	5'	CAGATGGAGTGGGAGAT	3'
Heat Shock Protein families (HSPs)					
HSP27	Heat shock protein family B (small) member 1	F	5'	GCTGAATAAAACCCGACA	3'
		R	5'	CAAGCAAGATCGAACCCCT	3'
HSP60	Heat shock protein family D (Hsp60) member 1	F	5'	CTCATCTCACTCGGGCTTA	3'
		R	5'	GGCTACAGCATCGGCTAA	3'
HSP70	Heat shock protein 70	F	5'	GACGACGGCATCTTCGAG	3'
		R	5'	GTTCTGGCTGATGTCCTTC	3'
HSP90	Heat shock protein 90 alpha family class A member 1	F	5'	TGGTGGCTGAGAAAGTGA	3'
		R	5'	TGTTCCACGTCCCATTGGT	3'
Apoptosis signaling					
BCL-2	B-cell CLL/lymphoma 2	F	5'	GAGTCGGATCGCAACTTGG	3'
		R	5'	CTCTCGGCTGCTGCATTGT	3'
BAX	BCL2-associated X protein	F	5'	TCTGACGGCAACTTCAACT	3'
		R	5'	GGTGTCCCAAAGTAGGAG	3'
Cyt-C	Cytochrome c	F	5'	TGCTGGTGATGTTGAGAAG	3'
		R	5'	GTGTCCTCGTTCCAGGTGA	3'
Caspase 3	Caspase 3	F	5'	AACCTCCGTGGATTCAAAA	3'
		R	5'	TTCAGGRTAATCCATTTTG	3'
Caspase 8	Caspase 8	F	5'	TGTCACAATCGCTTCCAGA	3'
		R	5'	GAAGTTCAGGCACCTGCTT	3'
Meat quality potential biomarkers					
AMD1	Adenosylmethionine decarboxylase 1	F	5'	TCCACAAGTCAAGTCCTCT	3'
		R	5'	CCATGGAGAGGAACGAAT	3'
CPT1A	Carnitine palitoyltransferase 1A	F	5'	ACAAGCCATAGTCTTAACG	3'
		R	5'	GCCAGTCCAGGATAACAA	3'
CPT1B	Carnitine palmitoyltransferase 1B	F	5'	ACTGTCTGGGCAAACCAA	3'
		R	5'	CTTCTTGATGAGGCCTTTG	3'

IRS1	Insulin receptor substrate 1	F	5'	TGCCTGACCAGCAAGACC	3'
		R	5'	ATCCACCTGCATCCAAAAC	3'
CRYAB	alpha-crystallin B chain; DJ-1	F	5'	GACCCTCTCACCATTACTT	3'
		R	5'	CAGCAGGCTTCTCTTCACG	3'
UPC3	Uncoupling protein 3	F	5'	GACGTGGTGAAGGTTTCGAT	3'
		R	5'	CGAGTTCATGTACCGGGTC	3'
HSPB1	Heat shock protein family B (small) member 1	F	5'	CCTGTCACTTTCGAGGCG	3'
		R	5'	AGGTGGGGATGGCTGGT	3'
GPX3	Glutathione peroxidase 3	F	5'	GCTTCCCCTGCAACCAATT	3'
		R	5'	GGACATACCTGAGAGTGG	3'
PGM1	Phosphoglucomutase 1	F	5'	GATCCTGTGGACGGAAGC	3'
		R	5'	ATGTACAGTCGGATGGTGG	3'
GALM	Galactomutarotase	F	5'	AACCGAATTGCCAAAGGA	3'
		R	5'	TCACCATCTGGACTGACCC	3'
GPI	Glucose-6-phosphate isomerase	F	5'	CGGAGTGGCGAATGGAAA	3'
		R	5'	GAGGCAATGATGAACAGG	3'
LDHa	Lactate dehydrogenase A	F	5'	ATCTTGACCTATGTCGCTT	3'
		R	5'	TCTTCAGGGAGACACCAGC	3'
ALDH9A1	Aldehyde dehydrogenase 9 family member A1	F	5'	ATCGGAGCTGTAGCCA	3'
		R	5'	TGGCCTATGCCAGAGC	3'
ACOT2	Acyl-CoA thioesterase 2	F	5'	CTACCTGCTTAATCACCTT	3'
		R	5'	GCGGCATAATCTCACCTT	3'
ACSL5	Acyl-CoA synthetase long chain family member 5	F	5'	CCCTACAGATGGCTGTCCT	3'
		R	5'	GCTCCCAAGGTGTCATACA	3'
ACADM	Acyl-CoA dehydrogenase medium chain	F	5'	GCGAGTACCCTGTCCCATT	3'
		R	5'	CCTCAGTCATTCTCCCCAA	3'
ACAT2	Acetyl-CoA acetyltransferase 2	F	5'	ATCACCAAGGAGCGAATC	3'
		R	5'	CCTCTTCTGCTTGTCCCCAA	3'
TRIM32	Tripartite motif containing 32	F	5'	CAGGCCAGGTATAAAGCA	3'
		R	5'	CTCGGCAATGTTAAGCAGG	3'
PRKAG3	Protein kinase AMP-activated non- catalytic subunit gamma 3	F	5'	CTCCGACTCCAACACAGAC	3'
		R	5'	TTCTGCAGCTCATCATCCC	3'
TNNC1	Troponin C1	F	5'	GATGACATCTACAAGGCTG	3'
		R	5'	GCACGAAGATGTCAAAGG	3'
TNNT1	Troponin T1	F	5'	CATCCGCGGTTTAGGAATC	3'
		R	5'	CCCCCTCTGGGATCTTCGG	3'
MYL3	Myosin light chain 3	F	5'	AGGACTTTGTGGAAGGGCT	3'
		R	5'	TCTTGCCCAGCCATCAACT	3'
TCAP	Ttitin-cap	F	5'	CGTGAGACCTACCACCAAC	3'
		R	5'	CCACTTTGGCAGGGGTGAA	3'
Endogen control					
GAPDH	Gglyceraldehyde-3-phosphate dehydrogenase	F	5'	CTACTCGGGCCTCTTCTGT	3'
		R	5'	GATTCTCCCGATCAGTCAG	3'
β-actin	The beta actin	F	5'	CCACGAAACTACCTTCAAC	3'
		R	5'	TGATCTCCTTCTGCATCCT	3'

PCR conditions

1 cycle of 2 min at 50°C and 10 min at 95°C followed by 40 cycles of denaturation at 95°C for 15 s,
annealing and extension at 60°C for 1 min