

The results of Primer-BLAST analysis with the bioinformatics tool:
<https://www.ncbi.nlm.nih.gov/tools/primer-blast/index.cgi>

Primer pair for ACACA gene

	Sequence (5'->3')	Length	Tm	GC%	Self complementarity
Forward primer	GGAACCGTGAAGGCCTA	18	58.60	61.11	6.00
Reverse primer	TGGACCAAGCTGCGGAT	17	58.48	58.82	5.00

>[NM_174224.2](#) Bos taurus acetyl-CoA carboxylase alpha (ACACA), mRNA

product length = 159

```
Forward primer  1      GGAACCGTGAAGGCCTA  18
Template        7108  .....  7125
```

```
Reverse primer  1      TGGACCAAGCTGCGGAT  17
Template        7266  .....  7250
```

Primer pair for CPT1B

	Sequence (5'->3')	Length	Tm	GC%	Self complementarity
Forward primer	AAGAGATCAAGCCTGTGATGGC	22	60.68	50.00	7.00
Reverse primer	GGATGCGAGTGGTGTGAA	19	58.07	52.63	3.00

>[NM_001034349.2](#) Bos taurus carnitine palmitoyltransferase 1B (CPT1B), mRNA

product length = 84

```
Forward primer  1      AAGAGATCAAGCCTGTGATGGC  22
Template        1076  .....  1097
```

```
Reverse primer  1      GGATGCGAGTGGTGTGAA  19
Template        1159  .....  1141
```

Primer pair for PLIN2 gene

	Sequence (5'→3')	Length	Tm	GC%	Self complementarity
Forward primer	GAGTGGAAGAGAAGCATCGG	20	58.07	55.00	4.00
Reverse primer	GTGACTCAATGTGCTCAGCA	20	58.48	50.00	7.00

>[NM_173980.2](#) Bos taurus perilipin 2 (PLIN2), mRNA

product length = 67

```
Forward primer  1      GAGTGGAAGAGAAGCATCGG  20
Template       915      .....  934
```

```
Reverse primer  1      GTGACTCAATGTGCTCAGCA  20
Template       981      .....  962
```

Primer pair for TXNRD1 gene

	Sequence (5'→3')	Length	Tm	GC%	Self complementarity
Forward primer	GCCAAGGAGGCAGCCA	16	59.16	68.75	5.00
Reverse primer	GTTCTCCAAGACCCCATCTA	21	58.52	52.38	3.00
Products on target templates					

>[NM_174625.5](#) Bos taurus thioredoxin reductase 1 (TXNRD1), mRNA

product length = 92

```
Forward primer  1      GCCAAGGAGGCAGCCA  16
Template       299      .....  314
```

```
Reverse primer  1      GTTCCTCCAAGACCCCATCTA  21
Template       390      .....  370
```

Primer pair for FASN gene

	Sequence (5'->3')	Length	Tm	GC%	Self complementarity
Forward primer	CTGCCGAAGACAGGGATTG	19	58.23	57.89	3.00
Reverse primer	CTGGTATACCTTCCCGCTCG	20	59.69	60.00	8.00

>[NM_001012669.1](#) Bos taurus fatty acid synthase (FASN), mRNA

product length = 108

```
Forward primer  1      CTGCCGAAGACAGGGATTG   19
Template        2863  .....                2881
```

```
Reverse primer  1      CTGGTATACCTTCCCGCTCG   20
Template        2970  .....                2951
```

Primer pair for CD36 gene

	Sequence (5'->3')	Length	Tm	GC%	Self complementarity
Forward primer	AAAAATTGAAGCATTGAAGAATCTGA	26	56.88	26.92	5.00
Reverse primer	CCCAGTCACTTGATTTCTGAACA	23	58.86	43.48	5.00

>[NM_001278621.1](#) Bos taurus CD36 molecule (CD36), transcript variant 1, mRNA

product length = 118

```
Forward primer  1      AAAAATTGAAGCATTGAAGAATCTGA   26
Template        1604  .....                1629
```

```
Reverse primer  1      CCCAGTCACTTGATTTCTGAACA   23
Template        1721  .....                1699
```

>[NM_174010.3](#) Bos taurus CD36 molecule (CD36), transcript variant 2, mRNA

product length = 118

```

Forward primer 1      AAAAAATTGAAGCATTGAAGAATCTGA 26
Template      1446  ..... 1471

Reverse primer 1      CCCAGTCACTTGATTTCTGAACA 23
Template      1563  ..... 1541

```

Primer pair for PFKP gene

	Sequence (5'→3')	Length	Tm	GC%	Self complementarity
Forward primer	CGGGACCTGCAGTCCAAC	18	60.36	66.67	8.00
Reverse primer	CTGCAGCTCTCGTTCCTGAG	20	60.46	60.00	6.00
Products on target templates					

>[NM_001193220.3](#) Bos taurus phosphofructokinase, platelet (PFKP), mRNA

```

product length = 89
Forward primer 1      CGGGACCTGCAGTCCAAC 18
Template      1893  ..... 1910

Reverse primer 1      CTGCAGCTCTCGTTCCTGAG 20
Template      1981  ..... 1962

```

Primer pair for LDHA gene

	Sequence (5'→3')	Length	Tm	GC%	Self complementarity
Forward primer	TGACTCTAGTGTGCCTGTATGG	22	59.24	50.00	6.00
Reverse primer	GATCACCTCATAAGCACTGTCAA	23	58.49	43.48	4.00

>[NM_174099.2](#) Bos taurus lactate dehydrogenase A (LDHA), mRNA

```

product length = 145
Forward primer 1      TGACTCTAGTGTGCCTGTATGG 22
Template      740  ..... 761

```

Reverse primer 1 GATCACCTCATAAGCACTGTCAA 23
Template 884 862

Primer pair for PDHA1 gene

	Sequence (5'→3')	Length	Tm	GC%	Self complementarity
Forward primer	TGCAGAGCTTACAGGACGAA	20	59.03	50.00	4.00
Reverse primer	TCCCAGGGGCACCTGA	16	58.93	68.75	8.00

>[NM_001101046.2](#) Bos taurus pyruvate dehydrogenase E1 subunit alpha 1 (PDHA1), mRNA; nuclear gene for mitochondrial product

product length = 118

Forward primer 1 TGCAGAGCTTACAGGACGAA 20
Template 509 528

Reverse primer 1 TCCCAGGGGCACCTGA 16
Template 626 611

Primer pair for SLC2A1 gene

	Sequence (5'→3')	Length	Tm	GC%	Self complementarity
Forward primer	GCTACAACACTGGAGTCATCAACG	24	61.90	50.00	4.00
Reverse primer	CGGAGAAGGAACCAATCATGC	21	59.33	52.38	4.00
Products on target templates					

>[NM_174602.2](#) Bos taurus solute carrier family 2 member 1 (SLC2A1), mRNA

product length = 168

Forward primer 1 GCTACAACACTGGAGTCATCAACG 24
Template 250 273

Reverse primer 1 CGGAGAAGGAACCAATCATGC 21
Template 417 397

Primer pair for G6PDH gene

	Sequence (5'->3')	Length	Tm	GC%	Self complementarity
Forward primer	CACCATCTGGTGGCTGTTC	19	58.44	57.89	8.00
Reverse primer	TTCTCCTCCGGGGTAGCT	18	58.89	61.11	6.00
Products on target templates					

>[NM_001244135.2](#) Bos taurus glucose-6-phosphate dehydrogenase (G6PD), mRNA

product length = 135

```
Forward primer  1  CACCATCTGGTGGCTGTTC  19
Template        240 ..... 258
```

```
Reverse primer  1  TTCTCCTCCGGGGTAGCT  18
Template        374 ..... 357
```

Primer pair for bCS gene

	Sequence (5'->3')	Length	Tm	GC%	Self complementarity
Forward primer	ATCACTGTGGACATGATGTATGG	23	58.29	43.48	8.00
Reverse primer	CTCTAAAACGGATGCCCTCA	20	57.31	50.00	3.00

>[NM_001044721.1](#) Bos taurus citrate synthase (CS), mRNA; nuclear gene for mitochondrial product

product length = 97

```
Forward primer  1  ATCACTGTGGACATGATGTATGG  23
Template        298 ..... 320
```

```
Reverse primer  1  CTCTAAAACGGATGCCCTCA  20
Template        394 ..... 375
```

Primer pair for GAPDH gene

	Sequence (5'→3')	Length	Tm	GC%	Self complementarity
Forward primer	ACCCTCAAGATTGTCAGCAA	20	57.04	45.00	4.00
Reverse primer	GCGTGGACAGTGGTCATAAG	20	58.64	55.00	3.00
Products on target templates					

>[NM_001034034.2](#) Bos taurus glyceraldehyde-3-phosphate dehydrogenase (GAPDH), mRNA

product length = 113

```
Forward primer 1 ACCCTCAAGATTGTCAGCAA 20
Template      492 ..... 511
```

```
Reverse primer 1 GCGTGGACAGTGGTCATAAG 20
Template      604 ..... 585
```

Primer pair for YWHAZ gene

	Sequence (5'→3')	Length	Tm	GC%	Self complementarity
Forward primer	TGAACTCCCCTGAGAAAGCCT	21	60.77	52.38	3.00
Reverse primer	ATCCGATGTCCACAATGTCAAG	22	58.73	45.45	5.00

>[NM_174814.2](#) Bos taurus tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein zeta (YWHAZ), mRNA

product length = 149

```
Forward primer 1 TGAACTCCCCTGAGAAAGCCT 21
Template      598 ..... 618
```

```
Reverse primer 1 ATCCGATGTCCACAATGTCAAG 22
Template      746 ..... 725
```