

Supplemental Table 1.

PCR primers for charactering the expression of starch synthesis genes in oat.

Enzymes	Gen name	Sequence (5'-3')	Amplicon (bp)	Genbank access.no.
ADP-glucose pyrophosphorylase small subunit	AsAGP-S	F:AGGTGGTGCAGGGACTAGATT R:GTTGAACTGCGTGAGCACATA	124	AY727927
ADP-glucose pyrophosphorylase Large subunit	AsAGP-L	F:TACACATCACGCAGAAACCTACC R:AATCAGCACCGAGCATTACCG	178	DQ406820
Granule-bound starch synthase I	AsGBSS I	F:TCCTCGACCTCAACAACAACC R:TGTGGATGCAGAACGCTACC	162	AB019623
Granule-bound starch synthase II	AsGBSS II	F:GCTCCACTTGCGAAACAGAATG R:GGAGTAGTAGAGAAATGGCAAAGC	151	AF109395
Starch branching enzyme I	AsSBEI	F:CCGCCCTAATTCATTCAAAGTCC R:GAAGTCGCCTCACCATCTGC	122	AF286317
Starch branching enzyme IIa	AsSBE IIa	F:GGGTTTAGGTGGTGAAGGCTA R:AAATCTACGGCGGCATTTATC	151	AF286319
Starch branching enzyme IIb	AsSBE IIb	F:GAGGCCCAAGTACTTCCA R:TTCCTCAAGATGCTGCATTG	150	AF286320
Starch synthase I	AsSS I	F:TTCGGGTGGATGACAGTTACAG R:CACAATCGCTAAGGCTAAAGAGTC	153	AF091803
Starch synthase II	AsSS II	F:TGGTCCGTAGCAGAGTAGAGC R:GCCCTTTGCCTCCGACTTAAC	147	AF155217
Starch synthase III	AsSS III	F:CGATGCCCGTGATTGGTTCC R:TTGTTCTTGTCATTGGTTCAGTTGG	143	AF258608
Starch synthase IV	AsSS IV	F:TGGTTCCTGATGCCTCTCTC R:GATACACCGTCACACCCTTACC	147	AY044844

Isoamylase	AsISA	F:AAGGAGTGCGAGGGTCTTGG R:GGTAAGTGGCTGGTGTGAAG	173	FJ491379
Starch debranching enzyme	AsPUL	F:GTATGGTGAGGGATGGGACTT R:CCTTGCTGTAGTGGGTTACCA	157	EF137375
