

**RT-PCR**

For RT-PCR verification of gene expression in maize, total RNA was extracted from endosperms of W64 o2 and K0326Y QPM. Total RNA was DNase 1 treated and then purified using Qiagen Rneasy cleanup kit. The cDNA was synthesized from 2 µg samples of cleaned RNA using IScript plus (Bio-Rad, Hercules, CA), according to the manufacturer's instructions. The cDNA was diluted five fold in water and subjected to regular RT-PCR with primers designed.

**Primers used for RT-PCR:**

GRMZM2G002678

F: 5'-TGTCATCAGCACAAAGGGTGT-3'

R: 5'-CGAGCGTGAATCCTAAGAGG-3'

GRMZM2G018193

F: 5'-CTCAGCAACAATAGTTTCTTCCA-3'

R: 5'-TATTTCTGGGAAGCCACAAACAT-3'

GRMZM2G096719

F: 5'-CCTCCTCTCTCAATTCTTGCAG-3'

R: 5'-ATAACAAGGAGGGAAAAACATGAA-3'

GRMZM2G388461

F: 5'-TTATTCCACAATGCTCACTTGC-3'

R: 5'-AGCAGTTGTTGCTGTTGTAGGTAG-3'

Tubulin

F: 5'-GTGTCCTGTCCACCCACTCTCT-3'

R: 5'-GGAACGTTTCACATCAACGTTTC-3'