

Appendix C Primers for sorghum sugar transporter semi-quantitative RT-PCR analysis, construction of sub-cellular location vector, and construction of yeast complementary research vector

Functional Classification	Primer Name	Primer Sequence
Gene Cloning	SbERD3F/R	5'-CGATGGAGCACGAGGATCAAG-3'/5'-ATCATAAGTGAAAGGGGGGCG-3'
	SbPLT5F/R	5'-AGCACAGAGCAGAGCAAGAGG-3'/5'-GAACCCCTCAATAAGACCCCTC-3'
	SbPLT6F/R	5'-GTAGCCCTTAAGTTAACGATGGC-3'/5'-GTTGGTTTTCTTCCATCTACATG-3'
	SbSTP3F/R	5'-AGAGGGTTGCTTCATCAGGA-3'/5'-CCATCAGATGGAGCAGTTAAACG-3'
	SbSTP8F/R	5'-AGAGAGAGAAAGGGAGGGAGC-3'/5'-AATAATGTCCACGAAAGCAAGC-3'
	SbSTP9F/R	5'-CTTCCTGCTTGAGGTTTCTGG-3'/5'-CTGTATGAGTAGATTATTGCCACC-3'
	SbINT3F/R	5'-TTGATTGAGATTCGGCTTGGC-3'/5'-TGCTGACAGGTAGCCTACGGC-3'
	SbTMT2F/R	5'-TTGTTGGAGGACGAGATGTCG-3'/5'-CTTCTGGTGAGATCCCTTCAAG-3'
	SbVGT2F/R	5'-AACGAACACGAGCTCCTGCTC-3'/5'-TGGATCAGTCAACTACAGACTCGC-3'
	SbpGlcT1F/R	5'-CACCGTCGTTAAGAGGATGATACG-3'/5'-GTCTCCAGGTCCAAGGATGCTC-3'
	SbSGB2F/R	5'-TCTCGTCTGTCAGCTTTCATTGC-3'/5'-CTCTGCTCTTAAATTCCTCCAC-3'
	SbSWEET18F/R	5'-TTCAGTTGTGTCGCAATGGCAG-3'/5'-GCTTGCGATGGAGAGCCTAGAC-3'
	SbSWEET21F/R	5'-AGCAACAATGGTTACTAGCATTTCG-3'/5'-GAAAAGCAGACCTTCAAGCTAAGG-3'
	SbSWEET11F/R	5'-TGCTCGATCCATTTAGGTTTCAG-3'/5'-GTAGGCAGCCTCAGTTTTAGGCT-3'
Real-time PCR analysis	SbERD3QF/QR	5'-GACGAAGCAACAGAAATCAAAG-3'/5'-GGCATTCACTCCCCAAAC-3'
	SbPLT3QF/QR	5'-GGAGTGAGAGGGACACGGTGAC-3'/5'-AGCGTGTCTGTCTAGTTTGGC-3'
	SbPLT5QF/QR	5'-ATAGAGGGTCTTATTGAGGGG-3'/5'-ACAAAGCACGAAACACAGGG-3'
	SbPLT6QF/QR	5'-ATGACCTTCTGTCCCTCTCG-3'/5'-GCATTTCCACCACCTTCTCC-3'
	SbSTP3QF/QR	5'-TCGTGCTGGGCATCAAGGTC-3'/5'-AAGAGCAGGTTGACGCAGACG-3'
	SbSTP8QF/QR	5'-CAGAGAGAGAAAGGGAGGGAGC-3'/5'-AGGTAGAGCGAGGAGGTGAACG-3'
	SbSTP9QF/QR	5'-AGATGGTGCTCGTGGAAGT-3'/5'-CTGTATGAGTAGATTATTGCCACC-3'
	SbSGB2QF/QR	5'-GTCAAATTGGAACATGTCTAGGC-3'/5'-CAGCAACAATAAGAACCCAG-3'
	SbpGlcT1QF/QR	5'-AGCATCCTTGGACCTGGAGACT-3'/5'-ATGTCAGGGGAGTAAGGGAAGC-3'
	SbINT3QF/QR	5'-GCTTTGAGCAGGTGGAGCAGA-3'/5'-ATCTTAAAGTGTGCCGCCA-3'
	SbTMT2QF/QR	5'-GGTCCCCTAATGTCTATGTCCTG-3'/5'-AACAAATGAAGGTATCGCGAGC-3'
	SbSWEET11QF/QR	5'-TCTTCGGAGTTTCTGGGAATGTC-3'/5'-GGAGGCAGTTGAGCAGCGTC-3'
	SbSWEET14QF/QR	5'-GCATCTGCTGGACTGCTTACG-3'/5'-CGTGGACTTGTAGTAGATGGCG-3'
	SbSWEET15QF/QR	5'-GTGTTTCTTTCGCCACTGCC-3'/5'-ATCCAGCCGAGCACTTTGAC-3'
	SbSWEET18QF/QR	5'-TGTGTCGGCTTCTCCGTCAG-3'/5'-ATAGAGGAACCAGACGACAGCG-3'
	SbSWEET21QF/QR	5'-CAATAAACACCAGAAAGCAGTC-3'/5'-TTGCAGGTGCTATGTATGTCCC-3'
	ActinQF/ActinQR	5'-ATGTTCCCTGGGATTGCTGA-3'/5'-CGTACTCAGCCTTGGCAATC-3'
Sub-cellular Location	SWEET11GFPP	5'-ATTTGGAGAGGACAGGGTACCATGGAGCATATCGCCAGGTTTC-3'
	SWEET11GFPR	5'-GGTACTAGTGTGCTGACTCTAGACACCTGGCTGGCGACGACC-3'
	SWEET18GFPP	5'-ATTTGGAGAGGACAGGGTACCATGGCAGGCTATCTCTGCA-3'
	SWEET18GFPR	5'-GGTACTAGTGTGCTGACTCTAGAGACCACGTGGACGGCTGGGC-3'
	SbERD3GFPP	5'-ATTTGGAGAGGACAGGGTACCATGGAGCACGAGGATCAAGA-3'
	SbERD3GFPR	5'-GGTACTAGTGTGCTGACTCTAGATAAGTGAAAGGGGGCGTTA-3'
SbPLT5GFPP	5'-ATTTGGAGAGGACAGGGTACCATGGCTTCCGCTGCGCTGCC-3'	

	SbPLT5GFPR	5'-GGTACTAGTGTGCGACTCTAGAGTTGGTGGCGGCCATTTCTGA-3'
	SbSTP3GFPP	5'-ATTTGGAGAGGACAGGGTACCATGCCGGCCGAGGGTTCTC-3'
	SbSTP3GFPR	5'-GGTACTAGTGTGCGACTCTAGAAACGGAGGCGCCATTGTTGG-3'
	SbINT3GFPP	5'-ATTTGGAGAGGACAGGGTACCATGACGATCGACATGTCCAT-3'
	SbINT3GFPR	5'-GGTACTAGTGTGCGACTCTAGACGGCGCAGCAGCACCCAAA-3'
	SbpGlcT1GFPP	5'-ATTTGGAGAGGACAGGGTACCATGATACGCTGCGCTGTAAC-3'
	SbpGlcT1GFPR	5'-GGTACTAGTGTGCGACTCTAGATTCTGCTACACTTAATTCCTG-3'
Construction of Yeast Complementa ry Research Vector	SbSWEET11-DRF	5'-TCCCCCGGGCTGCAGGAATTC ATGGAGCATATCGCCAGGTT-3'
	SbSWEET11-DRR	5'-GGGCCCCCCTCGAGGTCGAC CTACACCTGGCTGGCGACG-3'
	SbSWEET18-DRF	5'-TCCCCCGGGCTGCAGGAATTC ATGGCAGGCTATCTCTGCA-3'
	SbSWEET18-DRR	5'-GGGCCCCCCTCGAGGTCGAC CTAGACCACGTGGACGGCTG-3'
	SbSWEET21-DRF	5'-TCCCCCGGGCTGCAGGAATTCATGGTTACTAGCATTGCTT-3'
	SbSWEET21-DRR	5'-GGGCCCCCCTCGAGGTCGACCTAAGGCTTACAGCCATTG-3'
	SbPLT5-DRF	5'-TCCCCCGGGCTGCAGGAATTC ATGGCTTCCGCTGCGCTGC-3'
	SbPLT5-DRR	5'-GGGCCCCCCTCGAGGTCGAC TTAGTTGGTGGCGGCCATT-3'
	SbPLT6-DRF	5'-TCCCCCGGGCTGCAGGAATTCATGGCTTCCGCCGACCTCG-3'
	SbPLT6-DRR	5'-GGGCCCCCCTCGAGGTCGACCTACATGGTGGGCATTTCCA-3'
	SbSTP3-DRF	5'-TCCCCCGGGCTGCAGGAATTCATGCCGGCCGAGGGTTCTC-3'
	SbSTP3-DRR	5'-GGGCCCCCCTCGAGGTCGACTTAAACGGAGGCGCCATTGTT-3'
	SbSTP8-DRF	5'-TCCCCCGGGCTGCAGGAATTC ATGGCGGGCGGCGGGATG-3'
	SbSTP8-DRR	5'-GGGCCCCCCTCGAGGTCGAC TCACCTGTGATTGTTGGTGGCA-3'
	SbSTP9-DRF	5'-TCCCCCGGGCTGCAGGAATTCATGGCCGGCGGCGTGGTTGT-3'
	SbSTP9-DRR	5'-GGGCCCCCCTCGAGGTCGACCTACTGCATGCCGACGAGCT-3'
	SbTMT2-DRF	5'-TCCCCCGGGCTGCAGGAATTC ATGTCGGGGCTGTCTTGT-3'
	SbTMT2-DRR	5'-GGGCCCCCCTCGAGGTCGACTTAGGCTTTTGCAGCCGCTT-3'
	SbINT3-DRF	5'-TCCCCCGGGCTGCAGGAATTCATGACGATCGACATGTCCATG-3'
	SbINT3-DRR	5'-GGGCCCCCCTCGAGGTCGACCTACGGCGCAGCAGCACCCA-3'
	SbVGT2-DRF	5'-TCCCCCGGGCTGCAGGAATTCATGGCCTCCCATCCTCTC-3'
	SbVGT2-DRR	5'-GGGCCCCCCTCGAGGTCGACCTACAGACTCGCTTCAATCTC-3'
	SbSGB2-DRF	5'-TCCCCCGGGCTGCAGGAATTCATGCCGACGCCCTCGCCC-3'
	SbSGB2-DRR	5'-GGGCCCCCCTCGAGGTCGACCTACTTGTCTTGCCAGGGGTAG-3'
	SbpGlcT1-DRF	5'-TCCCCCGGGCTGCAGGAATTCATGATACGCTGCGCTGTAAC-3'
	SbpGlcT1-DRR	5'-GGGCCCCCCTCGAGGTCGACTCATTCTGCTACACTTAATTC-3'
	SbERD3-DRF	5'-TCCCCCGGGCTGCAGGAATTCATGGAGCACGAGGATCAAGAA-3'
	SbERD3-DRR	5'-GGGCCCCCCTCGAGGTCGACTCATAAGTGAAGGGGGGCG-3'