

## Supplementary Data

Supplementary Fig. 1. Genomic structures of the *OsSUS* gene family. Exons are indicated by black rectangles and introns by lines. Numbers indicate exon and intron size in nucleotides. Accession numbers for the genomic DNAs used to determine the structure of the *OsSUS* genes are listed in the Materials and Methods sections.

Supplementary Fig. 2. Genomic structures of the *Arabidopsis SUS* (*AtSUS*) gene family. Exons are indicated by black rectangles and introns by lines. Numbers indicate the exon and intron sizes in nucleotides.

Supplementary Fig. 3. Expression of *OsSUS* genes in rice leaf (L), root (R), flower (F), and immature seeds (S) from 1-12 DAF caryopses. The control transcript is *OsAct1*. The two open arrowheads and closed arrowhead indicate *DraIII*-digested *OsSUS5* and *DraIII*-undigested *OsSUS7* RT-PCR products, respectively.

Supplementary Table 1. Primers used for the full-length cDNA and promoter cloning of *OsSUS5* and *OsSUS7* genes and the construction of GFP fusion vectors

Primer*	Sequence (5' - 3')
OsSUS5/7-F	CACCATGGCATCCAAGCTGAGTTTCAAG
OsSUS5/7-R	CTACTCAGAAACTGGAGGCTTCTG
SUS5pro-F	CACCGCAAATCATGGATTAATATACCTC
SUS7pro-F	CACCTCTTTCAGTTCAGAACACTTACAA
558pro-F	CACCATTCAAGCTATCTCAGAGGTCGCC
SUS5/7pro-R	GGCAAAGAGACCACCAGACTTGG

\*F: forward primer, R: reverse primer

Supplementary Table 2. Gene-specific primers used for semi-quantitative RT-PCR analysis

Gene	Forward primer (5'-3')	Reverse primer (5'-3')
<i>OsSUS1</i>	ATGTCCATCTACTTCCCTTACTCT	GTATTGCTCAATAAGGTCAAACAT
<i>OsSUS2</i>	CTTGATATCACACCTAAGATCCTC	TTGTCCAAGTATATGTCTGAGTTG
<i>OsSUS3</i>	GAAGAAGTTTGAGGATCACTATCA	TATCTCTAAATGGAGAGAGGTGAG
<i>OsSUS4</i>	TGGTTCTTAGGTTAAAGAAACAAG	GTAGTTTCCAATTATGAAGTCTGG
<i>OsSUS5/7</i>	GATTCAGATGTTAAGTGGAGAGAG	ATCTTGTTTATCTCCTCGATCTC
<i>OsSUS6</i>	AATTACACCGACGGTAATCTAGTA	TGTGTAAAGGGAAAGTAAACAGAT
<i>OsAct1</i>	GGAAGTGGTATGGTCAAGGC	AGTCTCATGGATACCCGCAG

Supplementary Table 3. Nucleotide and amino acid sequence differences between OsSUS5 and OsSUS7

Position (nt)	OsSUS5	OsSUS7	Amino acid change
105	C	T	-
186	G	C	K→N
725	G	A	R→K
1005	A	G	-
1192	G	A	D→N
1584	A	G	-
2162	A	G	D→G
2261	G	A	C→Y
2416	G	A	M→V