

Descriptions of Additional Supplementary Files

Supplementary Data 1

Description: Significantly enriched GO terms in the DEGs up-regulated by the overexpression of OSA1 and the DEGs down-regulated by the knockout mutation of *osa1*. Differences were evaluated using the ultra-geometric test (FDR < 0.05).

Supplementary Data 2

Description: Significantly enriched GO terms in the DEGs up-regulated in both leaves and roots of OSA1-ox, and down-regulated in both leaves and roots of *osa1*. Differences were evaluated using the ultra-geometric test (FDR < 0.05).

Supplementary Data 3

Description: Significantly enriched GO terms in the DEGs down-regulated by the overexpression of OSA1 and also up-regulated by the knockout mutation of *osa1* in leaves and roots of rice. Differences were evaluated using the ultra-geometric test (FDR < 0.05).