Supporting information for

Persulfidation of NITRATE REDUCTASE 2 is involved in L-CYSTEINE DESULFHYDRASE-regulated rice drought tolerance

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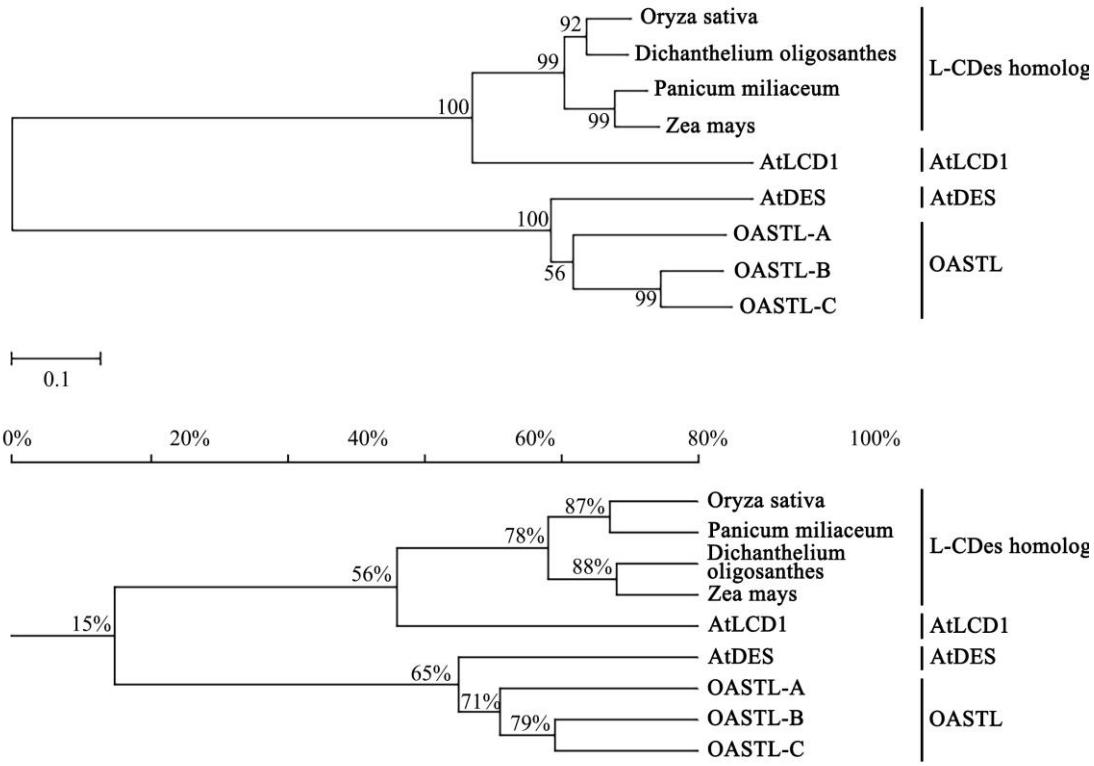

Figure S1. Sequence analysis of CDes, CDes homology and OASTL-A, B, C proteins from plant. Phylogenetic tree analysis of CDes, CDes homology and OAS-TL protein in higher plants. The phylogenetic tree was created by MAGE (Version 6.0) using neighbor-joining method with a bootstrap value of 1000 replicates. Homology tree analysis of CDes, CDes homology and OAS-TL protein in higher plants. The homology tree was created by DNAMAN with default parame.

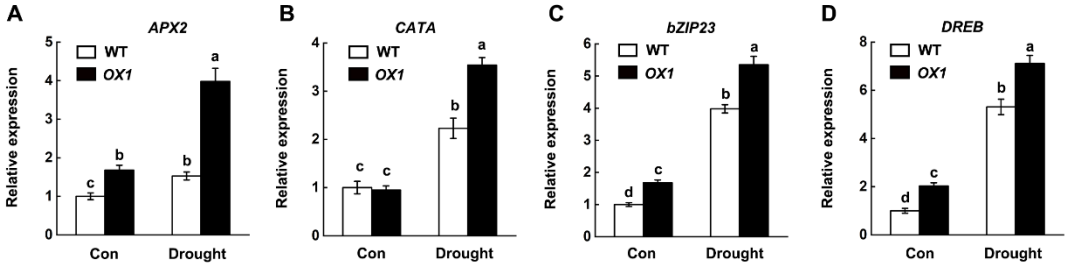

Figure S2. Overexpression of OsLCD1 promoted expression of genes involved in drought stress response. **(A-D)** Relative transcript levels of genes involved in drought stress response in rice seedling leaves were quantified after 4 days of drought stress by qRT-PCR. Expression levels are relative to corresponding untreated wild type samples (control), after normalization to *OsActin1* and *OsActin2*. Data are means ±SE (n = 3). Lower case letters indicate significant differences at $P < 0.05$ (Duncan's multiple range tests).

Table S1. The primer used in this study.

Target genes	Primer sequence
OsActin1	5'-CAACACCCCTGCTATGTACG-3'
	5'-CATCACCAGAGTCCAACACAA-3'
OsActin2	5'-ACAGGTATTGTGTTGGACTCTGG-3'
	5'-AGTAACCACGCTCCGTCAGG-3'
OsNIA1	5'-CCAATTCTTTCATCGTGTTCT-3'
	5'-CATGCAGCATTTCGTTTCT-3'
OsNIA2	5'-ACTGGTGCTGGTGCTTCTGG-3'
	5'-CGGCTGGGTGTTGAGGGACT-3'
OsCATA	5'-CAACCGCAACGTCGACAACTTCTT-3'
	5'-TTCACCGGCAGCATCAGGTAGTTT-3'
OsAPX2	5'-CATTGCCCGTGGTACTCT-3'
	5'-TTTCATACCAACACATCT-3'
OsbZIP23	5'-GACATGATGTGCTTCGGTG-3'
	5'-GAACTCCTCCAGCGTGATC-3'
OsDREB	5'-GAAACACACACACAAATCCGAA-3'
	5'-GTCTCCCTGAACTTGGTCC-3'