

The rice NRT2.4 alters metabolism and nitrogen uptake through root modulation

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Online Resource 1. Sequences of primers designed by Web MicroRNA Designer platform (WMD) (<http://wmd3.weigelworld.org/>) containing amiRNA plant expression vector gene *OsNRT2.4* (LOC_Os01g36720).

Gene	Primer	Sequence
<i>OsNRT2.4mi</i>	I MIR-s	5'-agTTTTGCAGACGAAAGGAACGTcaggagattcagtttga-3'
	II MIR-a	5'-tgACGTTTCCTTTTCGTCTGCAAAAActgctgctgctacagcc-3'
	III MIR*s	5'-ctACGTTGCTTACGTCTGCAAAAAttctgctgctaggctg-3'
	IV MIR*a	5'-aaTTTTGCAGACGTAAGCAACGTagagaggcaaaagtga-3'

Nota: Universal primer sequence G-4368: 5'-CTG CAA GGC GAT TAA GTT GGG TAA C-3', G-4369: 5'-GCG GAT AAC AAT TTC ACA CAG GAA ACA G-3'.

Online Resource 2. Sequences of forward and reverse primers used in semiquantitative real-time RT-PCR analysis for genes involved in nitrogen metabolic pathway. *OsUBC* (Ubiquitin – conjugating enzyme – E2) and *OseEF-1α* (1α elongation factor) were used as housekeeping genes.

Gene	Primer Forward	Primer Reverse	TIGR
<i>OsNRT2.4</i>	5'-ACGAAGCTGGTGAAGAAGAAG-3'	5'-ACGACGCCATCGCCATA-3'	LOC_Os01g36720
<i>OsNRT2.1</i>	5'-GCGACCGAGACCAGCAATAC-3'	5'-TTCATCACCGTTTGCAACAAG-3'	LOC_Os02g02170
<i>OsNAR2.1</i>	5'-AAGACGCAGGTGTTCTCTCC-3'	5'-ACTTCACCGTGCTTGGGC-3'	LOC_Os02g38230
<i>OsGS1;1</i>	5'-CCGGAGTCGTCGTCTCATT-3'	5'-GAGCTTCTCAATGGCGGACT-3'	LOC_Os02g50240
<i>OsGS2</i>	5'-AGGCGAAGGGAAAAGGCTAC-3'	5'-GAGGGTTGGCTCCCAAAGAA-3'	LOC_Os04g56400
<i>OsNIA1</i>	5'-CTACATCGACGTCAAGGGGC-3'	5'-TGGATGACCTGGTACATGGG-3'	LOC_Os08g36500
<i>OsUBC</i>	5'-CCGTTTGTAGAGCCATAATTGCA-3'	5'-AGGTTGCCTGAGTCACAGTTAAGT-3'	LOC_Os02g42314
<i>eEF-1α</i>	5'-CTCTTGGTCGTTTTGCCGTG-3'	5'-TGCAGATATGGAAAGCACCAC-3'	LOC_03g08020