

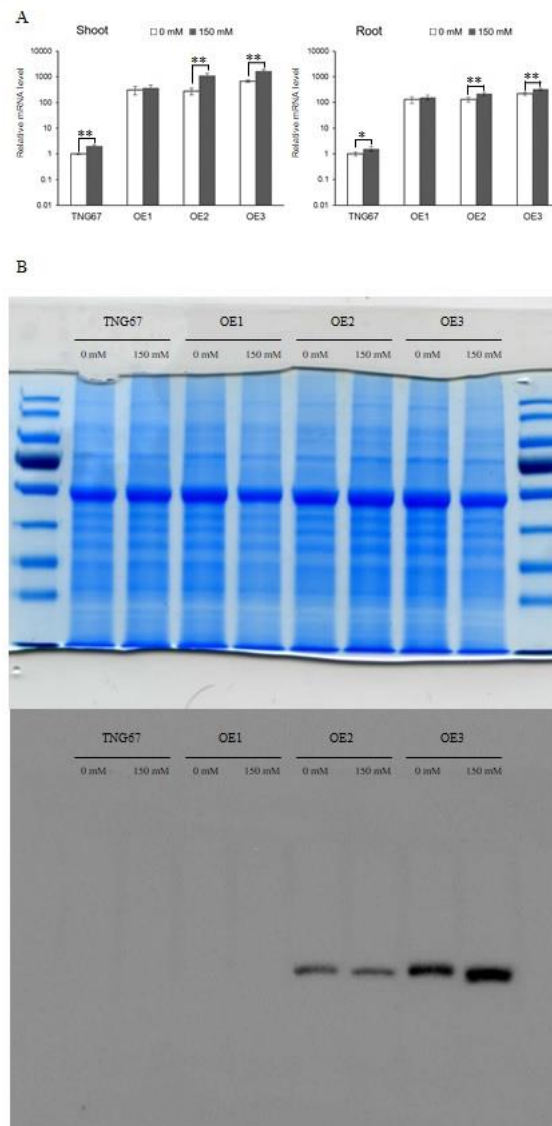


Figure S1. Molecular identification of *OsERF106MZ*-overexpressing transgenic rice. **a** The overexpression of *OsERF106MZ* in transgenic rice lines was confirmed using q-PCR. **b** Detection of the *OsERF106MZ*-GFP fusion protein in transgenic rice lines by Western blotting with anti-GFP antibodies. Upper panel, Coomassie blue staining of total protein as a loading control. Lower panel, Aliquots of 30 μ g of protein immunoblotted with anti-GFP antibodies. The images of the bands visualized by Coomassie brilliant blue staining and Western blotting were taken from the same SDS-PAGE gel and PVDF membrane, respectively.

Biological Process

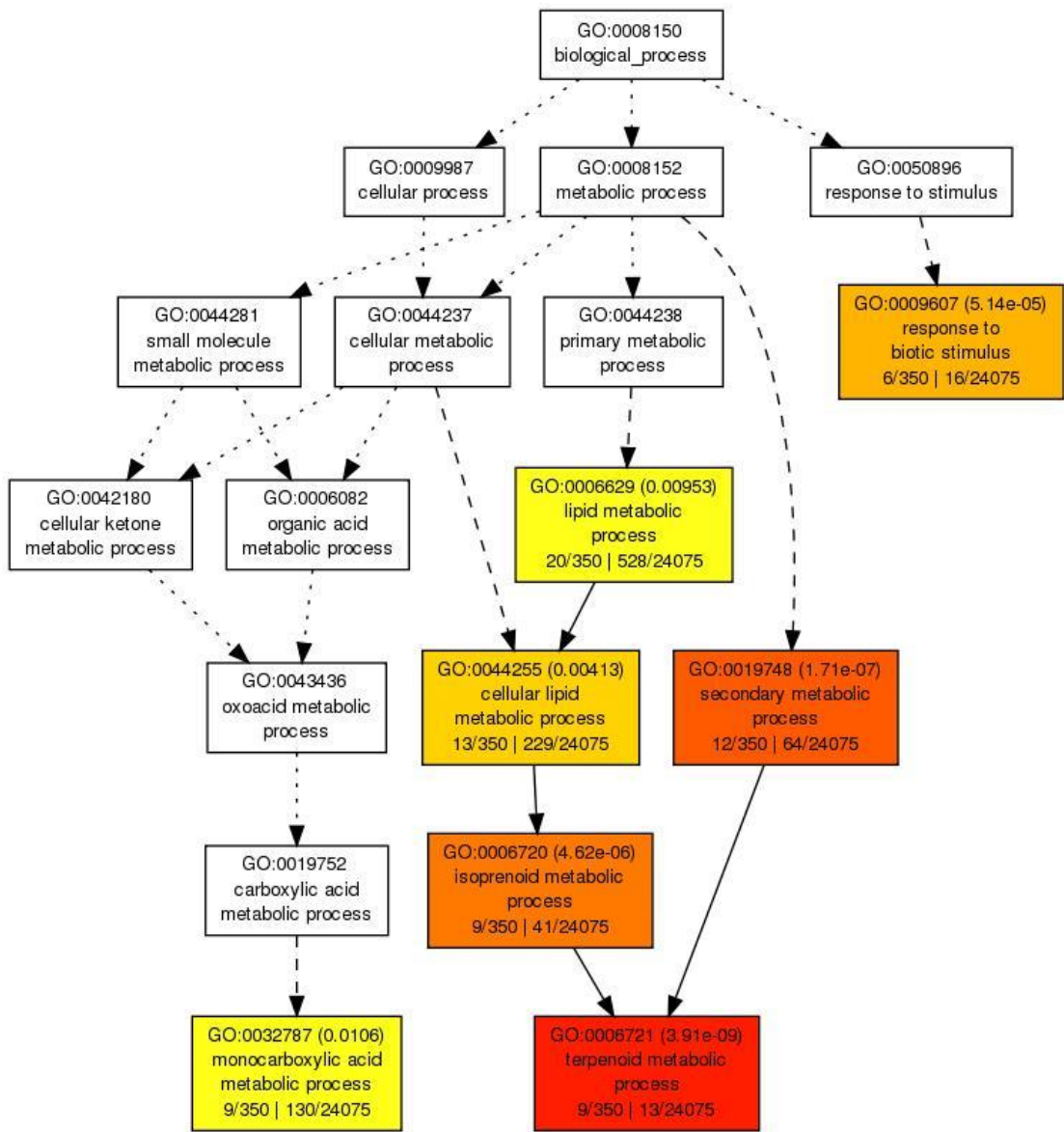
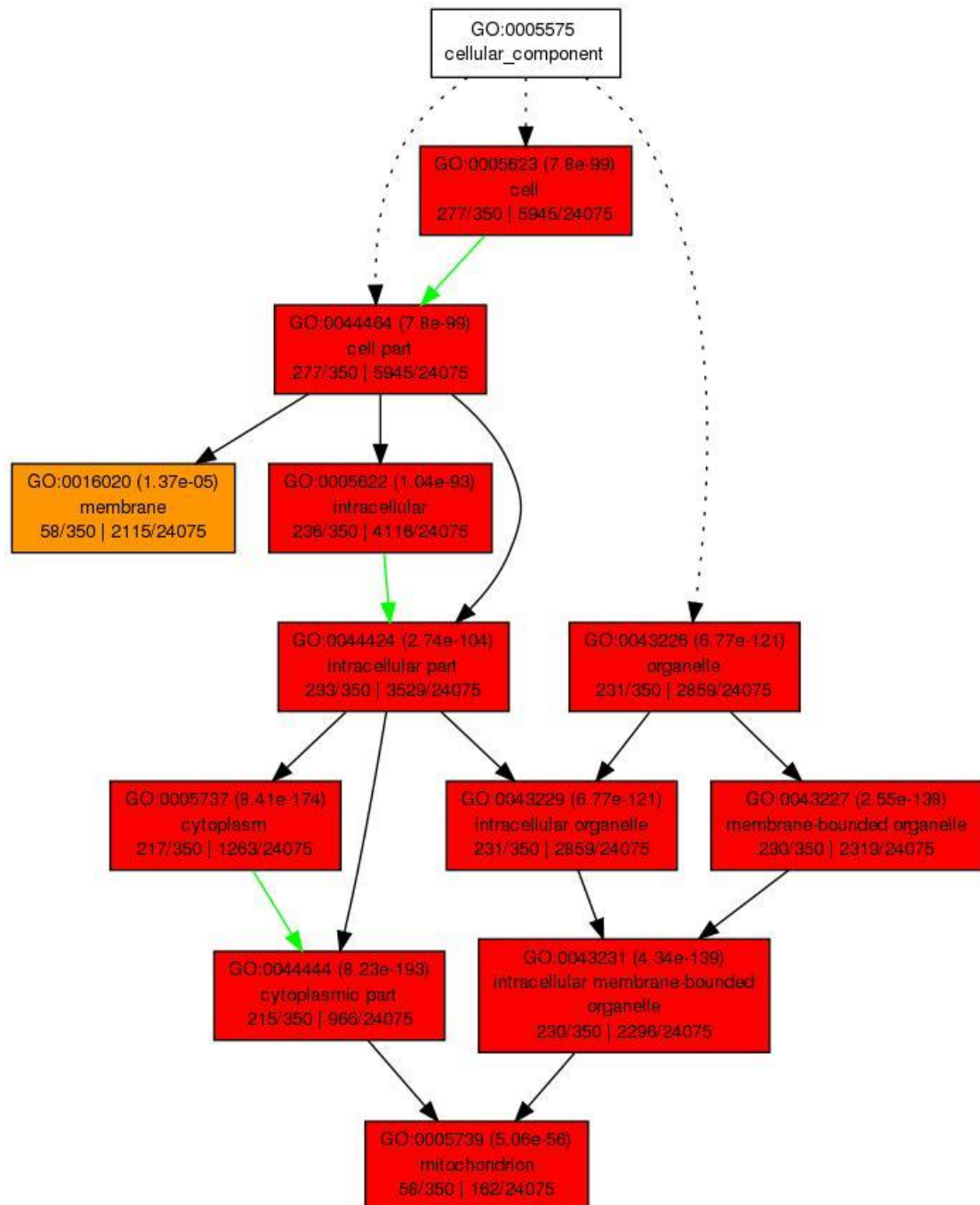


Figure S2. Go analysis of the common DEGs according to biological processes, cellular component, and molecular functions.

continued

Cellular Component



continued

Molecular Function

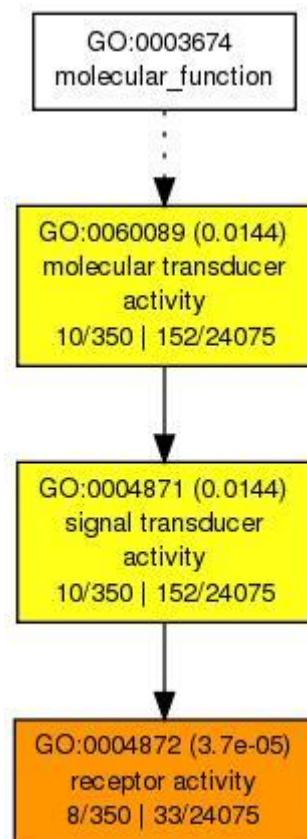


Table S1. Partial promoter sequences of *OsAO3* and *OsNPC3* genes.

GCC BOX: AGCCGCC

>*OsAO3* promoter

CATTATATTAAGGGATGGAGGGAGCAGTGTTTAAATTTTGGTCAAAGGGGATCACCTATACATTTGTCGACAAATTT
TCTCCTAAAAATTTGACAGATATAATTATAGTACAATCGTAGTGTAAATTATACTATAACTTGCATGTAACCTACAGTGTA
CTTGATGTATGTTTTACGTAATTTGAATAGTTAGATCTATTGCAAGATTTGTTCTTGAGGAAGAAAAAATCA
CAGCACACATATATGAAAGAATTTGTTCCCGCGGCCTCAATTTTACCGAAATAACATGTTACGGAGAGATTTTTGAA
AGTTACATATAAGTTACATGTAAGTTACAATGTAATTACACTACGATTGTACTATAATTACATCTGTCAAATTTTTGGA
ATAAAATTTGTCAACAAATATATAGCAAAATTTGTTATGAAAATATATTTAACTATTATTTAAGGAACTAATTTAGTAT
TATAAATATTAGTATATTTATCTATAAACTAGTTAAATTTAAAGTAGTTATGACTTTGATTAAAGTCAAAACGACTT
ATAATCTAAAACAGATATATAACAGATATATGGAGTAGGTTATTACACTACTAGAAAAGACATTTTTGTAGGCTGCCA
AAACTCATTTTTGCAGGTGAGAGAGAGGTCCGCCTGCACCACAACGACTGCGAAAATCGATGATTTTCATAGTCG
TGGCAACGGCCTACCTGCGAAAATGGAAGGGACGAAAAAATCGCGCCGGGAGCCGCTGCCGCCGCCGGC
CTGCGCCGTGCGCGCCGGCCTCCCCCTCCTCCTCGGCCAGATCTGGGAGCGAGGGGGGAGGGGGAGCTGC
CGCAGCCGCTCCACGCCCTCCGCCGCCGCCGGGAGCACACGCCACCGCGCCGCCGGGAGCACACGCCACC
GCGCCGCCTCACCTCCTCCTTACCGCACGCCGCCGCCGGGAGCACACGCCGCCGGGAGCCGCCGCCGCCT
CCGGCCGGCGCGCGGGGAGATGGGAGGGGAGGGGAGAGGAGGAGAGGTGAGGGGAGGGGAGAGGAGGAA
AGGTGAGGGGACTTGAAAAAATTTAGGCCACAAGTCTATTATATTAAGTCTATTTTCACAGGCGGACCACTTA
AGCGGCGCCTGCGTCCGCCTGCGAAACATTAAATTTACCCCGATTATATTTTATAGACGGTTATTTGGCTCTAA
GAGTCATGTCTGCCTGCGAAAATAAGACTCCTACGTTGGAAAAATGGTTTTTCAGTGTTATTTTAAGCCTCACG
CCCATATCCTTGCCATCGCGCGGTGTTCTGCTGCTGCTGCGCGGAGTAGTGACACGTCCATCCGTCGGGGT
CGCGGAATGGGACGCGTCCGCCGTGGAGCGGCACTCGCCGTACGTACGTACGCAACCCAACACATTAGCTCAG
CTAGCTGCCTCTCCATCGCATTTAACTCCTCCCTATAGGCAGCGATCGATCGGTACCCGCCCGCGCGCGCG
GCTGACAAACGCACGCACGCCGCTGGTTGTTGGCAATCGAGCGTGCGAGCGAGAGAGAAACGGAGGAGGAGG
GGACGGCCGGAGAAGACGACGACGAGGTGGAGAGATCGGATC**ATG**

>*OsNPC3* promoter

GCCGAACAGTTTAGTACTGGGCTTACCGAGGCCTGCAAACTTTGGGCCACCAAGGGCCTATAATATTTTAGGG
AAAAAGTCTATTTAGGCCCTGTACAAGTACATTAGTACTCGGCCTATTGCCACGGATTATCTAGAACTATATGGATG
AATTGAAGTTTTAAAACTTAACCTAACAAATAATTTAAATGAGTGGCTAAATAATACGTGGAAGCATATTTGAATT
ATTGTGTTGTTAACTAGGCATAGTATAGAGTGTACGTTGAAACAAAAGAGAAAGAAATAAGAGTTGTTGCTGAA
GTTGAAGGTGAAGGTATTCTTAGATCCTCATCAATTTCTATAGGAATATTCCTTTAAAAAATTATTTATTATTAAGTTT
GAAATAATTAATACCTACTTAATTAATTACTACCTCCTTCTCTAAATAAAGGATGTTGAACTAACTAGCATCATAAA
AATAAATATGGAGGGAGTATATTAATGGCACACCTTATTTTACGTGTCTTCCAGTACTTCTCCGTCTCATAATATA
AGAGATTTTGAATTTTGTCTGCACTGTTTGACCACTCGTCTTATTCAAAAAATTTATGTAAATGTAAAAACGAAA
AGTTGTGCTTAAATACTTTAGATAATAAAGTAAGTAAAAAATAAATAATAATTTTAAAAATATTTTAAATAAGACGA

GTGTTCAAACAATACAAACAAAAATTCAAATTCTTTATATTATGGGACGGAGGGAGTATTCTTCTTCTCTACTTT
CAAACATAAACATGAGAAGAGTACGCTGTACATAATAACCTAATACAGTAATTTTTTTAATGAACATAACAACCTAC
TACGACGTACTAATAATTAATCATGTCACCTCAGCAATTGCAAGGATTTGCTTAATTAACAAAATGAGACTACTTGTA
CATACTGTATTAGCAGCATCTCACACGTCTCCACCACACGAGAGCCGCAATAAATACACATAGAAGCAGCTACTA
TCAGCTCGCCACTGAGCTCTAGCTAATAAGCCATCCTCGATCGTTTATCTTCCTCTCCCTCTTCCAATCCCAGCCTC
GACGCCAGCCATG

Table S2. Primers used in this study.

PCR Type	Gene	Sequence (5'-3')	Annotation
qPCR	<i>OsERF106MZ</i>	GGTTTCTGCCGGACTAACGA	108 bp
	Os08g0537900	GATGGTCCAAAGGGAGGCTT	
	<i>OsAO3</i>	ACAACTGGGGTGCTCTTTCA	224 bp
	Os07g0281700	AGATTCTCCTGCGCTGTCTG	
	<i>OsNPC3</i>	GCTCTTCTACAGGAACATGAGG	116 bp
	Os11g0593000	GCTCGATGACGACGTAGTTT	
	<i>OsMYB91</i>	TCGAGCGCTGGAAGAACTACCT	118 bp
	Os12g0572000	GCGATCTTCTTCCACTTGTTGC	
	<i>OsSPX-MFS1</i>	GCGATTCTTGGGTGTACTGT	233 bp
	Os04g0573000	CGTGAAAGCAACGACAGGTT	
	<i>OsWRKY76</i>	TTCCGAATGCTTTTCTGCTG	111 bp
	Os09g0417600	ATCGTGAGGCCCGATAGAAG	
<i>OsACTIN1</i>	CTCAGCACATTCCAGCAGATGTG	126 bp	
Os03g0718100	GATAACAGCTCCTCTTGGCTTAGC		
PCR Type	Amplicon	Sequence (5'-3')	Annotation
ChIP-qPCR	<i>AO3-a</i>	GGGGATCACCTATACATTTG GTTACACTGTAGTTACATGC	112 bp
	<i>AO3-b</i>	TCACCTCCTCCTTCACCGCACG GCTTAAGTGGTCCGCTGTG	214 bp
	<i>AO3-c</i>	GCTGGTTGTTGGCAATCGAG CTCGTCGTCGTCGTCTTCTC	80 bp
	<i>NPC3-a</i>	CAGTTTAGTACTGGGCTTAC AATAGGCCGGAGTACTAATG	118 bp
	<i>NPC3-b</i>	TTAGCAGCATCTCACACGTC GGGATTGGAAGAGGGAAGAG	139 bp
	<i>NPC3-c</i>	TCAGTAGCATGGCAGCTAGC TGTCTTCATGTGCGGTTTGG	147 bp