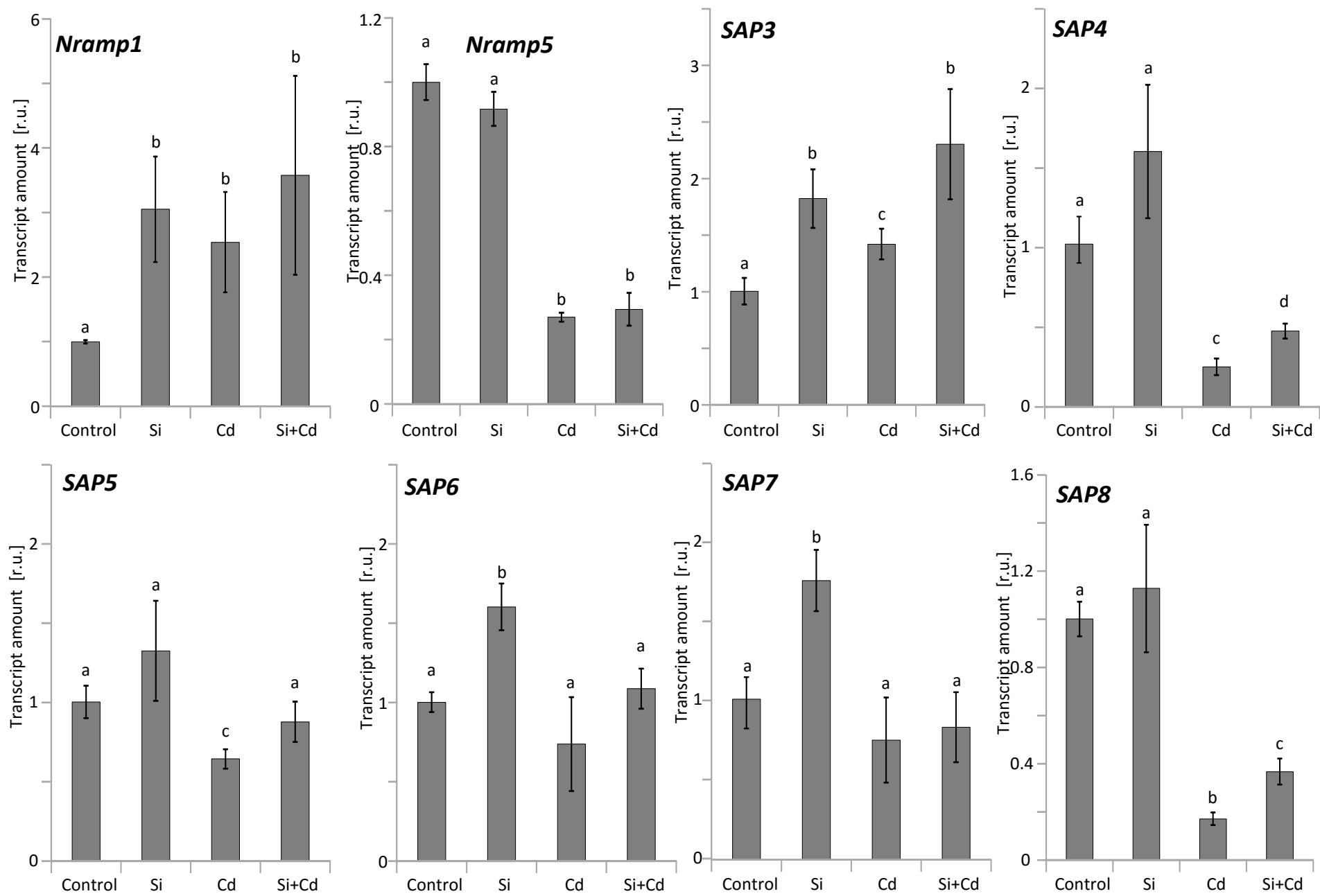


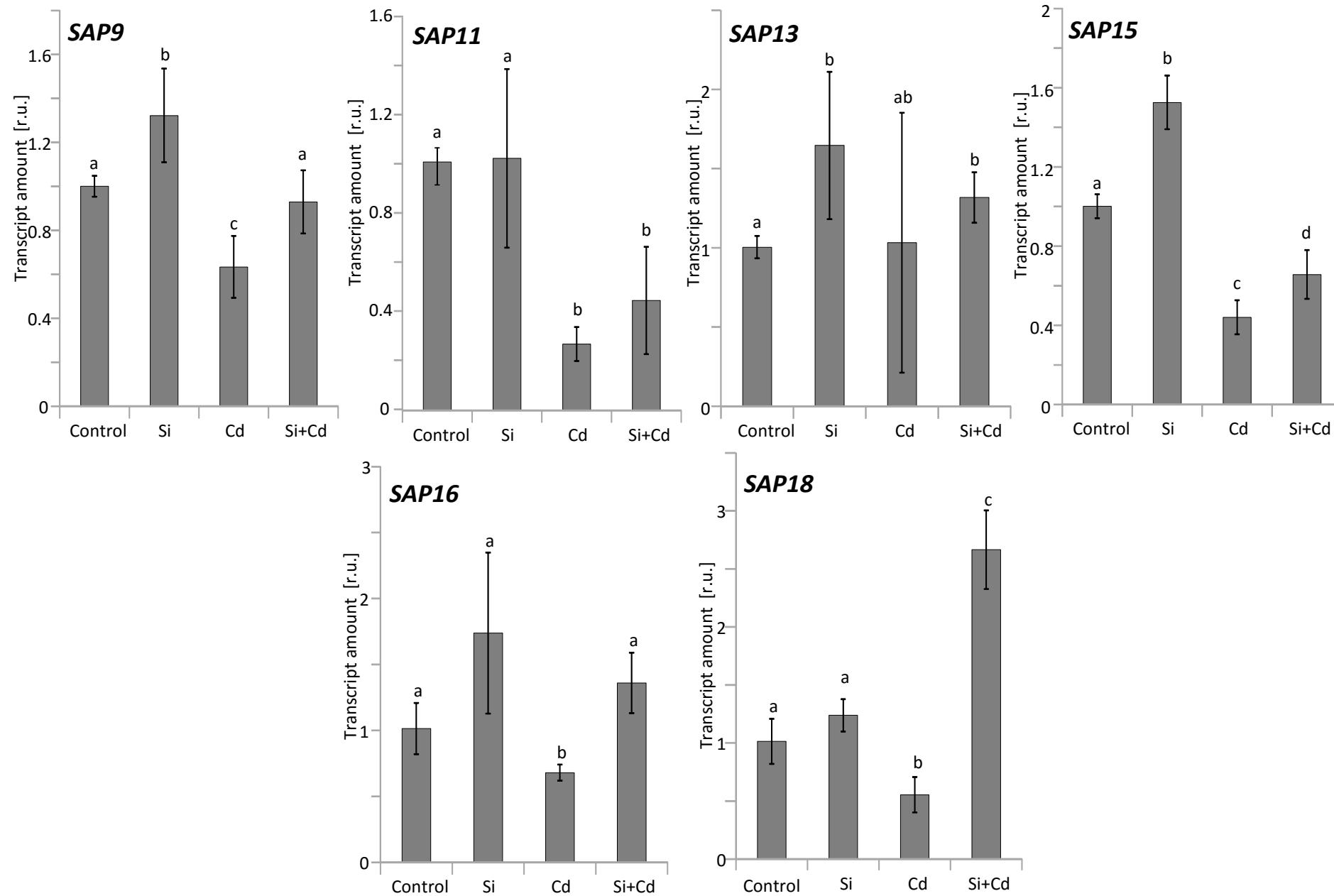
**Figure S1:** Potassium (K), magnesium (Mg) and zinc (Zn) contents in roots, shoots and leaves of rice genotype IR64 grown in hydroponic nutrient solution with or without Cd and supplementary Si. Data are means  $\pm$  SD from four independent experiments. Data groups of significant difference were calculated by t-test and are labelled with different letters ( $p < 0.05$ ).

## Supplementary Figure S2

### Group II: Independent effect of Si and Cd

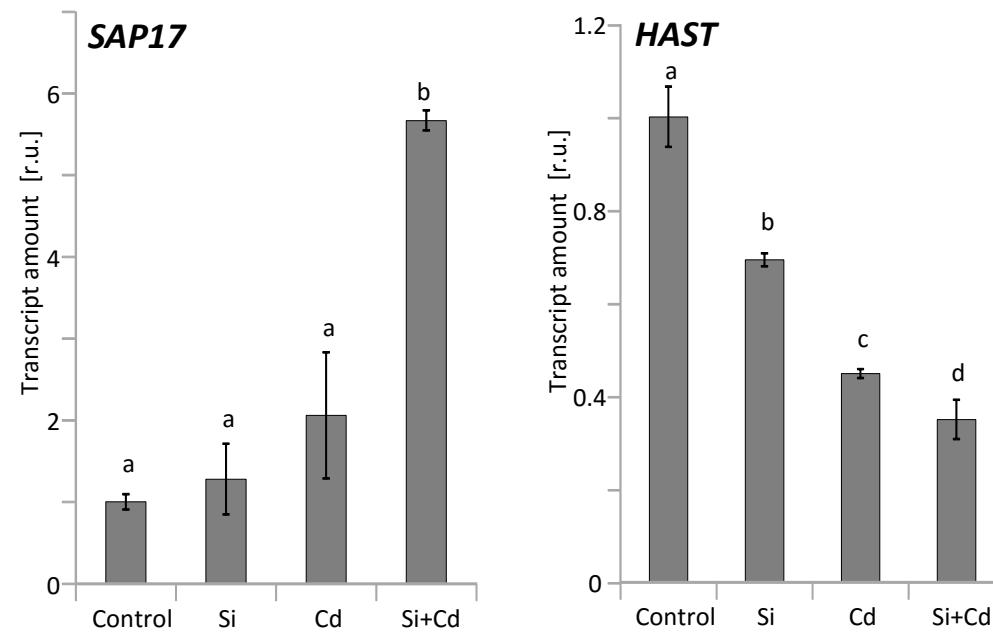


....**Group II:** Independent effect of Si and Cd



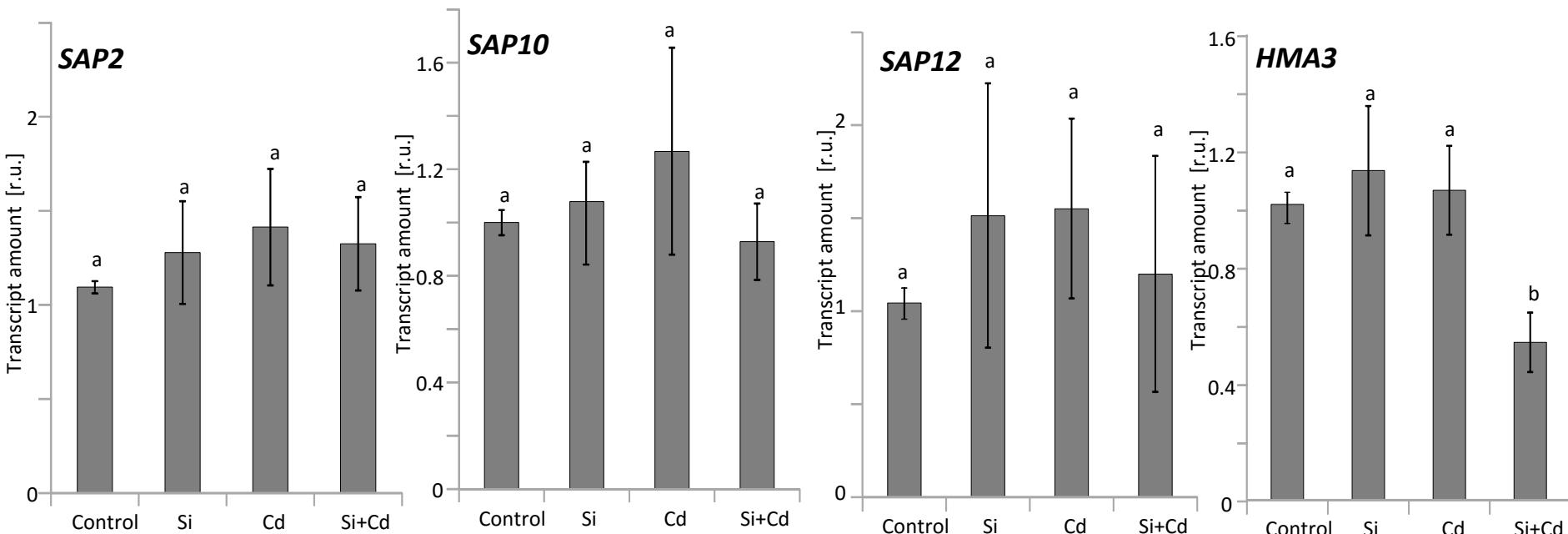
## Supplementary Figure S2

**Group III:** Additive effect (positive or negative) of Si and Cd



## Supplementary Figure S2

### Group IV: Complex patterns



**Figure S2:** Transcripts abundance in rice roots exposed to Cd toxicity and changes in response 96 hours after Si supply. Transcripts were classified in four response groups according to differential pattern under Cd and/ or Si supply. Group I targets are shown in Fig. 5B. Group II-IV category members are included in Supplementary Figure S2. Figure S2 are means  $\pm$  S.D. of n=4 from two independent experiments. Letters mark significance groups with p<0.05.

**Table S1:** Sequence of primers used for real-time PCR analysis.

Targets	Accession id	Sequence
<i>OsSAP1</i>	LOC_Os09g31200.1	5'-TTTAATTGCAAACGGGAGGATA-3' 5'-TCGATTCTTTCCCTAACCA-3'
<i>OsSAP2</i>	LOC_Os01g52030.1	5'-ACTGCTCGATCTGCCAAC-3' 5'-GCAAATCAGCAATCGACCAA-3'
<i>OsSAP3</i>	LOC_Os01g56040.1	5'-GCGCAGTTACGTCTGATTCC-3' 5'-CCGGCTCAGGGTTGTTCTT-3'
<i>OsSAP4</i>	LOC_Os02g10200.1	5'-CATCAATAACTGCAGGCTTCT-3' 5'-ACAATGCTATCGATGGAGGA-3'
<i>OsSAP5</i>	LOC_Os02g32840.1	5'-GGCGACAAGCTCAAGGACAAGATC-3' 5'-CATGGCTGGCTGGCGATTTC-3'
<i>OsSAP6</i>	LOC_Os03g57890.1	5'-AACAACTGTGGCTTCTTGG-3' 5'-ACCAAAGGTGTGGAAGACAA-3'
<i>OsSAP7</i>	LOC_Os03g57900.1	5'-CCGGATTGAGCTCTCCTCT-3' 5'-GCTGCTACTCAATGTTGCTTGT-3'
<i>OsSAP8</i>	LOC_Os06g41010.1	5'-CGATGTGGCAACTTGTACTG-3' 5'-TTAGCCTGGCAATAGCATC-3'
<i>OsSAP9</i>	LOC_Os07g07350.1	5'-AAACAACGTGGCTTCTTCG-3' 5'-CGTAAATGCCTCTTCTCCA-3'
<i>OsSAP10</i>	LOC_Os07g07400.1	5'-CCGGGGACAGTGACAAAACATC-3' 5'-CATCACCCTCGTCCCCTCGCCT-3'
<i>OsSAP11</i>	LOC_Os08g39450.1	5'-ACGACTGCAGCTTCGACTACAA-3' 5'-TGTATTATCCTTTAGAACCTAACGATCTT-3'
<i>OsSAP12</i>	LOC_Os08g33880.1	5'-CGCCTGCACCTTCGACTT-3' 5'-CGATCAGCGGGTTCTCCTT-3'
<i>OsSAP13</i>	LOC_Os01g51990.1	5'-TTTATTACGTGCTCGGTTAGGAT-3' 5'-TTGGCGCATTTAACCTCATCCGTGA-3'
<i>OsSAP14</i>	LOC_Os03g57920.1	5'-AAGCTGGCCTTCAGGATTG-3' 5'-TTGATCGGCTACTTCGATTGA-3'
<i>OsSAP15</i>	LOC_Os05g23470.1	5'-CAGCACAAATGACAGAACCA-3' 5'-TTCTGGCTGAGAATTGAGG-3'
<i>OsSAP16</i>	LOC_Os07g38240.1	5'-GACTGCAACCAGATCGACTT-3' 5'-TTTCGATTTGGACACTGATG-3'
<i>OsSAP17</i>	LOC_Os09g21710.1	5'-GGAGGCATTGATCTGTCCAA-3' 5'-AACCATTCCTGTAAAGAATAGC-3'
<i>OsSAP18</i>	LOC_Os07g07370.1	5'-CACCGGGAACGGCGACAAAGTGGT-3' 5'-CAAGGTCGTGCCGACCTCTCGG-3'
<i>OsPCS1</i>	LOC_Os05g34290.1	5'-ACACGATTGATGAGGCACT-3' 5'-TTGGGAGGAAGATGATTCAA-3'
<i>OsNAC6</i>	LOC_Os03g60800.1	5'-GGGTCAAGACTGATTGGAT-3' 5'-TTGTTGTACAGCCGACACAG-3'
<i>OsNramp1</i>	LOC_Os07g15460.1	5'-CCATGGGAGTAGATTGTTGC-3' 5'-CGCATCCAAGAAAAACTCACT-3'
<i>OsNramp5</i>	LOC_Os07g15370.1	5'-TCCTGGATTCATGGTGTCT-3' 5'-CCAATCAGAACCCAGAG-3'
<i>OsHAST</i>	LOC_Os03g09970.1	5'-AAGCTCATCGACGAGTTCAC-3' 5'-CAGGCTGATCAACACCTCT-3'
<i>OsHMA3</i>	LOC_Os07g12900.1	5'-CTTCATCAAGGGTGGAGATG-3' 5'-GAACGAGTCGATGCTGAAC-3'
<i>OsHsf31</i>	LOC_Os02g32590.1	5'-CTGATTGCCTCGGATCATTT-3' 5'-CGTCATCATCTGCATCCATC-3'
<i>OsbHLH</i>	LOC_Os01g06640.1	5'-AGTGGTGGACCAAGTGAAGG-3' 5'-GCATTCGATGGAGACTTCGT-3'
<i>OsAP2/Erf</i>	LOC_Os07g22730.1	5'-AGCACAAGCAGATCGTCCTC-3' 5'-ATGGCTAGTTGCTCGGACA-3'

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<i>OsaTubulin</i>	LOC_Os03g51600.1	5'-TCTGAACGTGGATGTCAATG-3' 5'-GAGATCACTGGAGCGTAGGA-3'
<i>OsActin</i>	LOC_Os03g50885.1	5'-AGGCCGTCCCTCTCTGTAT-3' 5'-GGGGAGAGCATATCCTTCAT-3'

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