

Additional file 5: Multiple sequence alignment of four members of NAC family expressed during the functional transition of the cotyledons

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Glyma12g04383.1  MNREKLMFMAGS VRTGGKGTVRRKKKAVHKTTTTDDKRLQSTLKRIGVNAIPAIEEVNIF 60
Glyma11g12180.1  MNREKLMFMAGS VRTGGKGTVRRKKKAVHKTTTTDDKRLQSTLKRIGVNAIPAIEEVNIF 60
Glyma11g12170.1  MNREKLMFMAGS VRTGGKGTMRKKKAVHKTTTTDDKRLQSTLKRIGVNAIPAIEEVNIF 60
Glyma01g18780.1  MDVEKLMFMAGS VRTGGKGTMRKKKAVHKTTTTDDKRLQSTLKRIGVNAIPAIEEVNIF 60
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Glyma12g04383.1  KDDVVIQFLNPKVQASIAANTWVVSQSPQTKKLQDILPSIIHQLGPDNLENLKKLAEQFQ 120
Glyma11g12180.1  KDDVVIQFLNPKVQASIAANTWVVSQSPQTKKLQDILPSIIHQLGPDNLENLKKLAEQFQ 120
Glyma11g12170.1  KDDVVIQFLNPKVQASIAANTWVVSQSPQTKKLQDILPSIIHQLGPDNLENLKKLAEQFQ 120
Glyma01g18780.1  KDEIVIQFLNPKVQASIAANTWVVSQSPQTKKLQDILPNIHQLGPDNLENLKKLAEQFQ 120
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Glyma12g04383.1  KQAPEGAAGSTTAQEENDDD-VPELVPGQDFETAAEETKAAS 161
Glyma11g12180.1  KQAPEGATGSTTAQEENDDDDVPELVPGQDFETAAEETKAAS 162
Glyma11g12170.1  KQAPEGAAGSTTAQEENDDDDVPELVPGQDFETAAEETKAAS 162
Glyma01g18780.1  KQVPEAGDGATAAQE-DDDDAVPDLVPGETFETAAEETKS-- 159
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Our RNA-Seq data revealed that four specific members of NAC transcription factor family expressed during functional transition (stage-4 and stage-5) of soybean seedling development. We used pooled cotyledons of stage 4 and stage 5 for ChIP-Seq experiment. These four members of NAC family possess that synthetic peptide sequence (black rectangle) used for developing the antibody and they are closely related. Thus, our antibody is specific for these four members of NAC family since they show high homology in their sequence and are the only members expressed during physiological transition at stage 4 and stage 5.