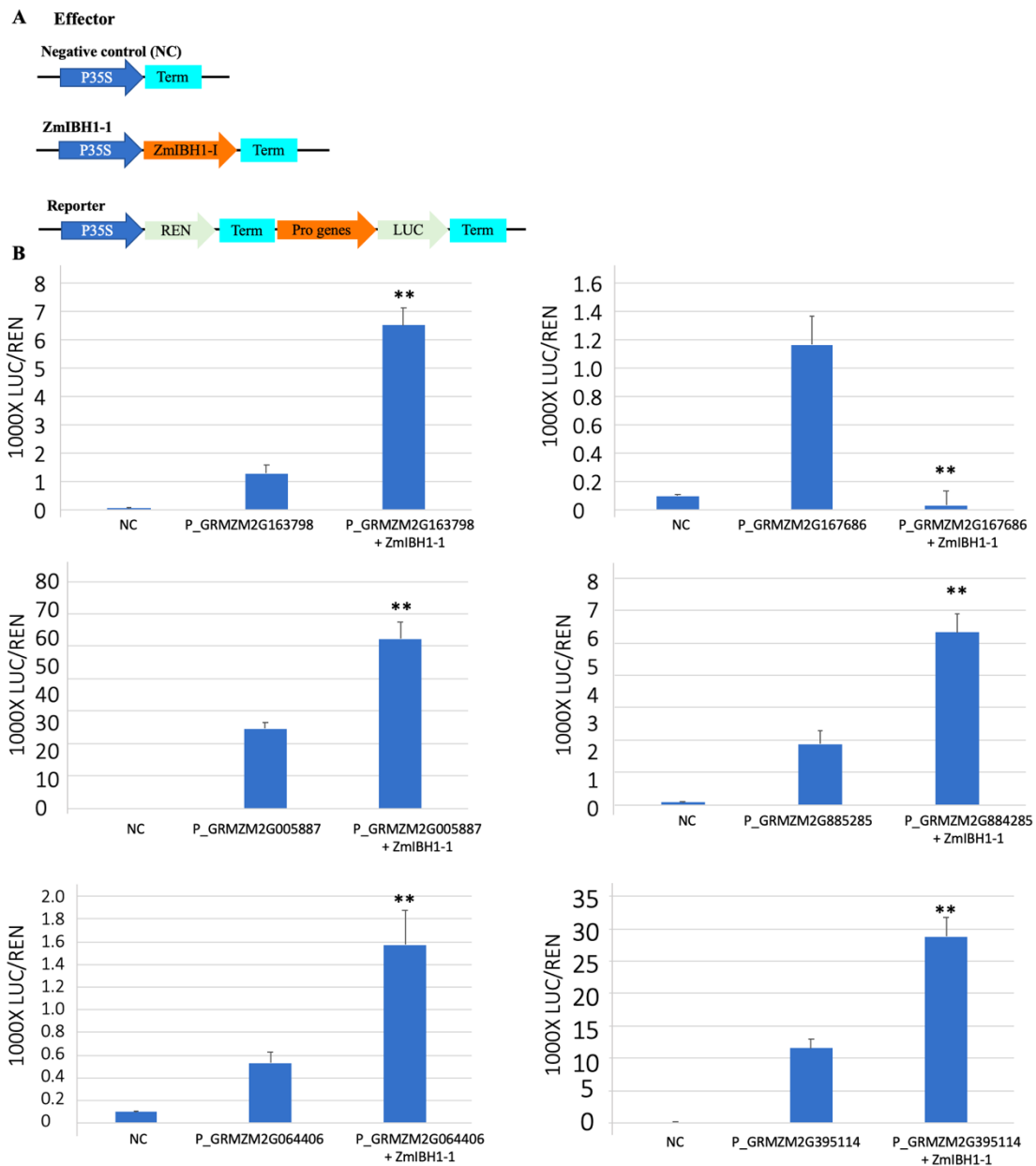


Yu82.seq	ATG CC CAGGAAGAGGACGGCGCGCCATCAGCACAGGAACACCGCCAAACCTAACCTACCTCCGCCCGCGGGCCGCGCCAGCACCCGGCCCT	100
Yu87-1.seq	ATG CC CAGGAAGAGGACGGCGCGCCATCAGCACAGGAACACCGCCAAACCTAACCTACCTCCGCCCGCGGGCCGCGCCAGCACCCGGCCCT	100
Consensus	atggccaggaagaggacggcgccgccaatcagcaccaggaacccaccgccaacccctaaccctaacctccgcccggggccgcccagcagccggccct	
Yu82.seq	CGGACGAGCCCGCCGCGTCTCGAAGCGCATGCTGGCCCTTTCACCTTCTCCGCGCGTGGCCAGGATCCACAGCACACCCCGCGCCGCGCCCGCGG	200
Yu87-1.seq	CGGACGAGCCCGCCGCGTCTCGAAGCGCATGCTGGCCCTTTCACCTTCTCCGCGCGTGGCCAGGATCCACAGCACACCCCGCGCCGCGCCCGCGG	200
Consensus	cggacgagcccgccgcccgtcgtcgaagcgcatgctggccctttcacttctccgcccgtggccaggatccacagcaccaccccgccgcccggccgcccgg	
Yu82.seq	CACCATCCGCCCGCGGGCCCTACTCGTCCATGGCGCGCGCTCCGACCCAGCCCGGGCTGGACGCAAGCGGTGCTCCGCCAGGCTCGCGCGCGCAGGGGG	300
Yu87-1.seq	CACCATCCGCCCGCGGGCCCTACTCGTCCATGGCGCGCGCTCCGACCCAGCCCGGGCTGGACGCAAGCGGTGCTCCGCCAGGCTCGCGCGCGCAGGGGG	300
Consensus	caccatccgcccggccctactcgtccatggcgccgctgcccaccacgcccggcctggacgcaagcgctgctccgcccaggctcggccgcccagggcg	
Yu82.seq	GCTGCCAGGTCCTCCAGGGAGCCGTCCTGCTCGGAGACGCGTCCGCTCCGCCGCGCGTCTCTCCGCCCGCGTCTCTCCGCCAGCAGCCGGGGAGT	400
Yu87-1.seq	GCTGCCAGGTCCTCCAGGGAGCCGTCCTGCTCGGAGACGCGTCCGCTCCGCCGCGCGTCTCTCCGCCCGCGTCTCTCCGCCAGCAGCCGGGGAGT	400
Consensus	gctgccaggtcctccagggagccgctcctgctcggagacgctgctcctccgcccggcgtcctcctccgcccggcgtcctccgcccagcgcccggggagt	
Yu82.seq	CGACGTCGCGCCGAGCCGCTGC...CTCCGCCCGCGTGGCGCCCGGGCCCGCCCTCCGAGGCAGCCCGGGAAACCGCCAGGGCCGACCGCTCCG	497
Yu87-1.seq	CGACGTCGCGCCGAGCCGCTGC TGG CTCCGCCCGCGTGGCGCCCGGGCCCGCCCTCCGAGGCAGCCCGGGAAACCGCCAGGGCCGACCGCTCCG	500
Consensus	cgacgtcggccgagccgctggtggctccgcccggcgtggcgcccggggcccgcctccgagggcagggccgggaaacccggccagggccgacgctccg	
Yu82.seq	CCGGCTCGTCCCGCGCGCGGAGATGGAGTACGGCAGCCTCTCCGACGAGACCGCGACTACGTGCGCTCCCTCCGCCCGCAGGTGCAGTCAATGCAG	597
Yu87-1.seq	CCGGCTCGTCCCGCGCGCGGAGATGGAGTACGGCAGCCTCTCCGACGAGACCGCGACTACGTGCGCTCCCTCCGCCCGCAGGTGCAGTCAATGCAG	600
Consensus	ccggctcgtcccggcgccgagatggagtagcggcagcctcctcgacgagacggcagactacgtgctcctccgcccaggtgcagctcatgcag	
Yu82.seq	AGCCTCGTCGACCTCTTCTCCGCCAA TGA TCGATCGTCCAACACCGAACCAAGTAATTAATTAATACCGCATGGTTAATTAATTC TGTTCTAGCTTGC	697
Yu87-1.seq	AGCCTCGTCGACCTCTTCTCCGCCAA TGA TCGATCGTCCAACACCGAACCAAGTAATTAATTAATACCGCATGGTTAATTAATTC TGTTCT...TGC	696
Consensus	agcctcgtcgacctcttccgcccattgactcgtcgaacacccagcaagtaattaattaaccgcatggttaattaattcctgttctagcttgc	
Yu82.seq	ACCGTCCATCGTTCGCCCGCGCCGCCCTTTCGTATCTATATCATCGCATATCTCTTCTTCGTGCCACATATGAGATGGATGAGTGATTAAGATAGGAGA	797
Yu87-1.seq	ACCGTCCATCGTTCGCCCGCGCCGCCCTTTCGTATCTATATCATCGCATATCTCTTCTTCGTGCCACATATGAGATGGATGAGTGATTAAGATAGGAGA	796
Consensus	accgctccatcgttcgcccggccgcccctttcgtatctatcatcgcataatctcttctcgtgccacatatgagatggatgagtgattagataggaga	
Yu82.seq	TTATTGAAAGAGATTGTTATTGCTGGTACATATATA TTT TAGTTGGTAAGATAAGATTATTAGTAGGTGTATGTATAGGTTGGGAACATACATGCATG	897
Yu87-1.seq	TTATTGAAAGAGATTGTTATTGCTGGTACATATATA TTT TAGTTGGTAAGATAAGATTATTAGTAGGTGTATGTATAGGTTGGGAACATACATGCATG	896
Consensus	ttattgagaagattgttattgctggtagacatataatattagctggtaagataagattattagtaggtgtatgtataggttgggaaacatatacgcattg	
Yu82.seq	GAAGATGGTACCA CGCC CACACACCAAGCAGCAATTGGAGGGAGAGGAGATTATTATTGAGSTAATTAATTGTAACATATATA AGAGAGAATTGAAGCA	997
Yu87-1.seq	GAAGATGGTACCA...CACACACCAAGCAGCAATTGGAGGGAGAGGAGATTATTATTGAGSTAATTAATTGTAACATATATA AGAGAGAATTGAAGCA	992
Consensus	gaagatggtaccacgcccacacacccaagcagcaattggagggagaggagattattattgaggttaatttaattgtaacatataagagagagaattgaagca	
Yu82.seq	TGGAG TC CACATACATACATACATAAGCTATTAGTGCAGTCTTCTGCTGTGGGTGAGATGATTGGGTATGCATATAT TTT TGTAATAAATTGGAGCCAT	1097
Yu87-1.seq	TGGAG CC CACATACATACATACATAAGCTATTAGTGCAGTCTTCTGCTGTGGGTGAGATGATTGGGTATGCATATAT TTT TGTAATAAATTGGAGCCAT	1092
Consensus	tggagccacatacatacatacataaagctattagtgtagcttctgctgtgggtcagatgattgggtatgcataatattttgtaaaaaatttggagccat	
Yu82.seq	GTCATG	1103
Yu87-1.seq	GTCATG	1098
Consensus	gtcatg	

Supplementary figure1. Sequence alignment of Yu82 and Yu87-1. Polymorphisms are highlighted in cyan and the predicted translation start of ZmIBH1-1 is boxed in yellow and the predicted termination codon of ZmIBH1-1 is boxed in red.



Supplementary figure 3. Results of the dual-luciferase transient transcriptional activity assay. (A) The 35S:REN-Pro zein:LUC reporter constructs were transiently expressed in onion epidermal cells together with control vector or 35S:ZmIBH1-1effector, respectively. (B) The expression level of Renilla (REN) was used as an internal control. The LUC/REN ratio represents the relative activity of candidate gene promoters. Data are values of three independent experiments. Significant differences from the corresponding control values (using Student's t test [n = 3]): *P < 0.05, **P < 0.01, and ***P < 0.001.