

**Supplemental Table 1. Primers used for construct preparation**

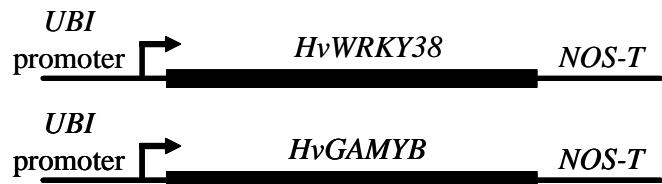
Primers	Primer sequences	Genes/Fragments	Restriction sites
P1	AATTGGCGCGCCATGGATCCATGGAT GGGCAGCCAGCC	<i>HvWRKY38</i>	AscI
P2	TAAGGCGCGCCTAATTGATGTCCCT	<i>HvWRKY38</i>	AscI
P3	ATGGCGCGCCATGTACCGGGTGAAG AG	<i>HvGAMYB</i>	AscI
P4	GAGGCAGCGCCTCATTTGAATTCCCTCC GAC	<i>HvGAMYB</i>	AscI
P5	TATGGCGCGCCATGGAGGAAGTGTTC TCG	<i>BPBF</i>	AscI
P6	TTAGGCGCGCCTACATCAGGGAGGT GCTG	<i>BPBF</i>	AscI
P7	ATTGGCGCGCCATGACATATGGAGG AGAGAG	<i>SAD</i>	AscI
P8	ATTGGCGCGCCGGTCGACCTACCACG AGC	<i>SAD</i>	AscI
P9	TATTGCTTAGCTCTGCCGACCAAGGG	<i>HvWRKY38 RNAi</i>	BspI
P10	TTAACGCTAACGCACTGCATTATCCTA G	<i>HvWRKY38 RNAi</i>	Bsu36I
P11	CGCTGTAGCTCCGACTCTCGAGCCGC AACCTCAGGGTC	<i>HvWRKY38 LZ</i> <i>Mutant 1</i>	
P12	CCCTGAGCATCTGCCATGGCGCCGG TTCTCCTCG	<i>HvWRKY38 LZ</i> <i>Mutant 2</i>	
P13	ATTGGCGCGCCATGCAATGGCGCAA GTAC	<i>HvWRKY38</i> <i>C-terminal</i>	AscI
P14	TTAGGCGCGCCTAATTGATGTCCCT GGTC	<i>HvWRKY38</i> <i>C-terminal</i>	AscI

P1 to P8 are primers for preparation of effector constructs. P9 and P10 are primers for preparation of *HvWRKY38 RNAi* construct. P11 to P15 are primers for *HvWRKY38* mutagenesis studies. P16 and P17 are primers for preparation of *HvWRKY38 C-terminal* region.

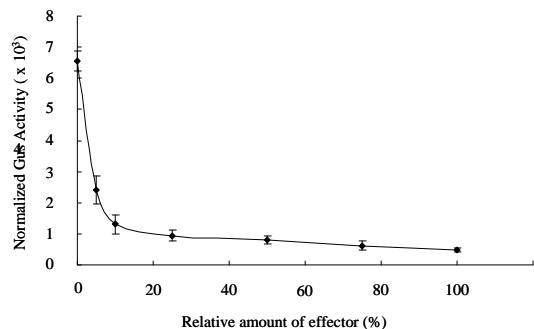
**A Reporter construct**



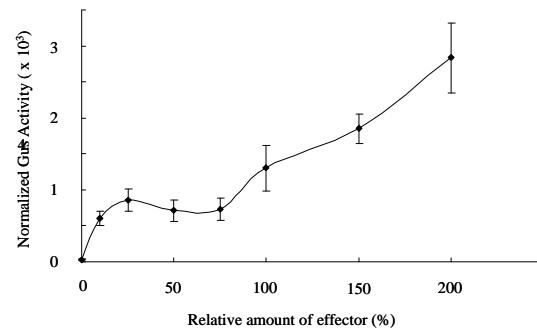
**Effector constructs**



**B**



**C**



**Supplemental Figure 1.** Functional interactions between HvWRKY38 and HvGAMYB.

A, Schematic diagrams of reporter and effector constructs used in the co-bombardment experiment. B, Varied amounts of *UBI-HvWRKY38* (from 0% to 100% relative to the reporter construct) were co-bombarded into barley aleurone cells with a constant amount of *UBI-HvGAMYB* (100%), *Amy32b-GUS* (100%), and the internal construct. The relative amount of *UBI-HvWRKY38* is indicated as a percentage compared to the amount of reporter. Each data point indicates the mean  $\pm$  SE of four replicates.