**Supplementary Fig. 1: The full and uncropped image of Fig. 5a.**
Investigation of the efficiency of transient transformation by GUS staining. The *Arabidopsis* plants were transiently transformed with pCAMBIA1301. After transformation for 72 h, GUS staining was performed.

**The promoter of *AtCAT3* (AT1g20620)**


gattgtcttctaatgattgccactttctgagaatagtatgttactgttgattgttgtacctagctctagttgtaaataataatatcaaa

ctaagtaacaagagcaacttgttgacactaaagggaccccaagttaccctcaatcaaaaattgtggatcagttcatcatcgaa

gtaacgtgttaattatcgtcatatgctccacaacatcgactccccaccatacccactcaataatgtcaattcagctctctcttttg

tatttttataaagaatgtatttaaattttcaacccataatttatagattcatgatcatctattaataattcattaaatacttttctgcatatt

gatttatttaaaagccgtacgcaagctcaaatcggataagactaaaataatatcacccagttaagttaactaacttattttattttg

aatagtagtattaattacttttgttcaactactccaatactgtttatatcctttcgacggtattagttattttcatgtttcacgcatttttgt

aattgcaaatacagacacctttgttgtaacacatgttgattaattttccgaaactatatactttgaagacaaaaatttaaaacaaa

gaaacctcagatctacagttccacctcgtgtctgacacgagtttctatgcgataagatcgaacatgtatatcagcagactttact

atagatgaactcatattagtaataagatccaaatacggaaataaacaacttggaaagtgaatggaagttttaagagaaaaatc

atttctagaattatttttagatcatttctttttttggagcatccattagagttttgtttttagactttatgatttatttttctttgttatcagc

acaataattgattttcaaaagatattgtatctttttttatctcttgagaagcacagcacaacaacgagcaatgctgacttgtcgg

ggtcagcgattattattagtcaccgaacgaatttttcttgggttggagccaaaacctagcaaaaaaatatctaagtgggggca

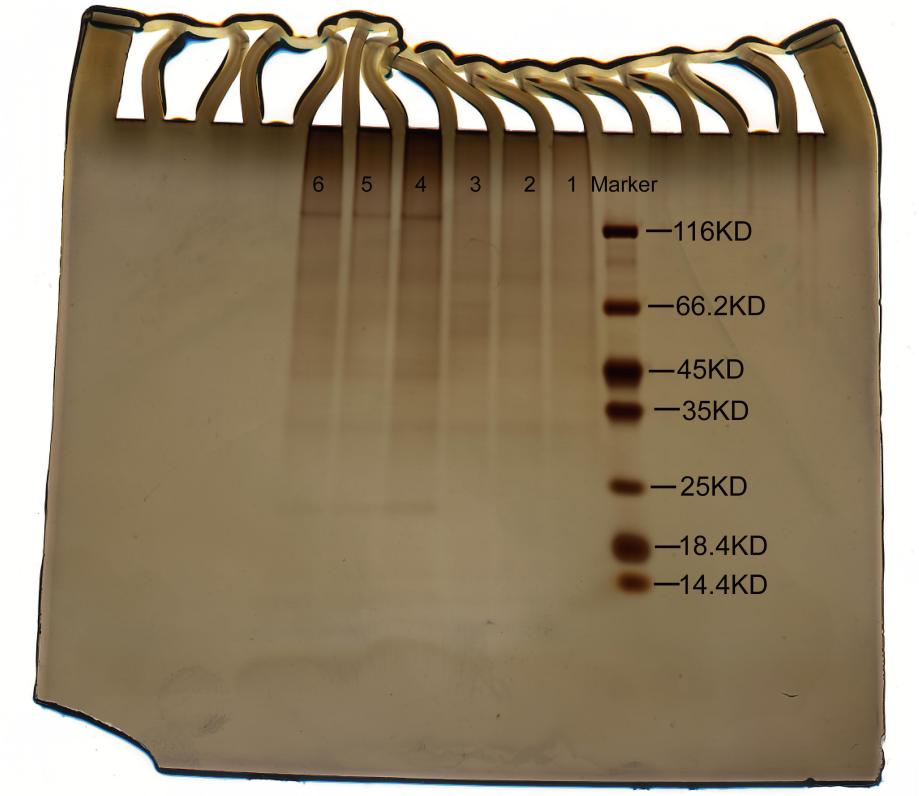
ctacattattgttttaacaccaaggaaaagtaaacaacaatggcccatttttactgtatcgagaaattgatctcgaaaggacaa

atgtacccttccacttcgggaatccattattgtgcataacacacgctgtttcactatatatactttcacataggatctcaacactct

cactaaaccaaaatcctcaaaagcctatttgggggatcatcaaccttctatcatcaccATGGATCCTTACAAG

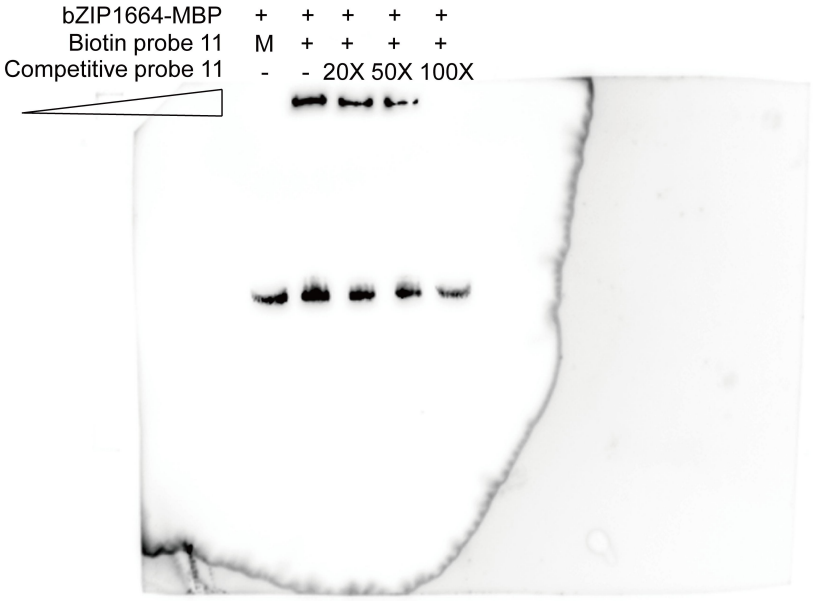
**Supplementary Fig. 2: The location and length information of biotin probes used for hybridization.**

The figure shows the sequence of the promoter of *AtCAT3*, which is 1281 bp upstream of translation start site. The arrow indicates the location, sequence, and the direction information of 12 probes that were labeled with biotin and used for hybridization.

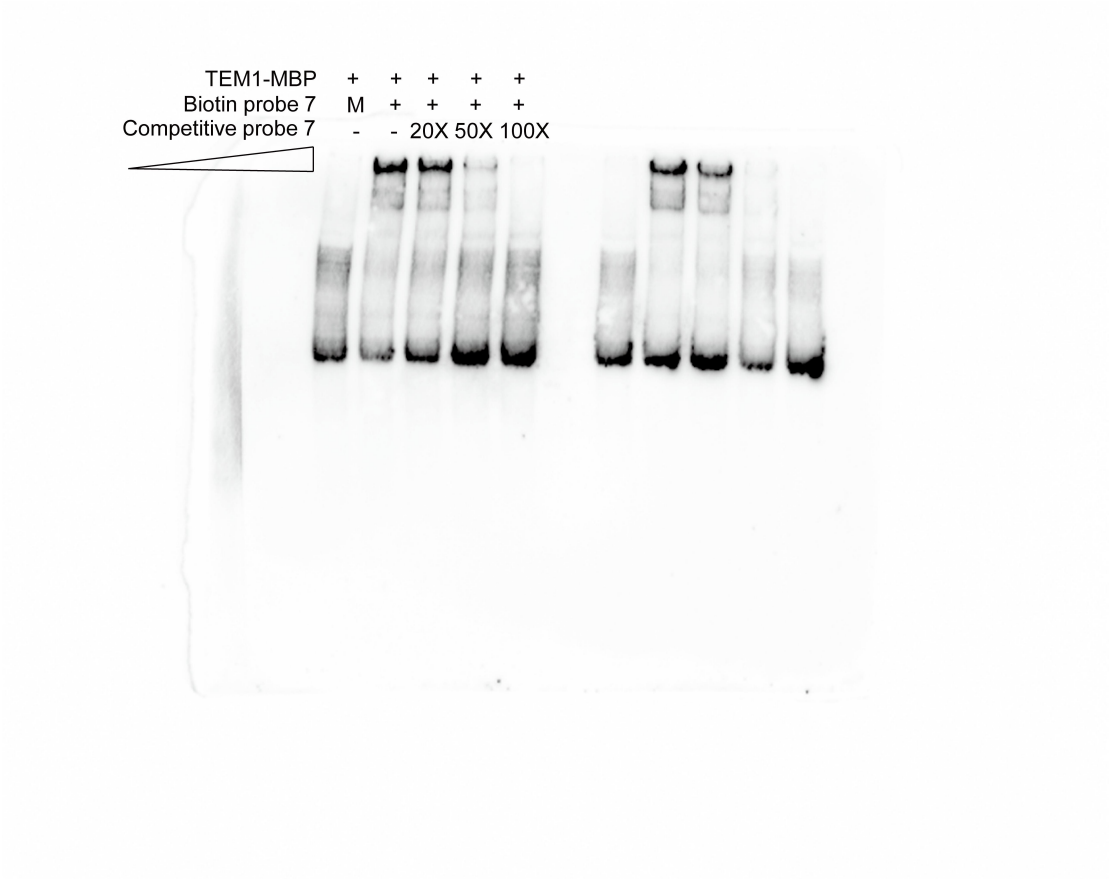



**Supplementary Fig. 3: The full and uncropped gel image of Fig. 6b.**

SDS-PAGE analysis of the proteins captured using R-ChIP. Lanes 1–3: the proteins isolated from wild-type plants from three biological replicates, respectively. Lanes 4–6: the proteins isolated from transient transformed plants from three biological replicates, respectively. The proteins were stained with silver nitrate.

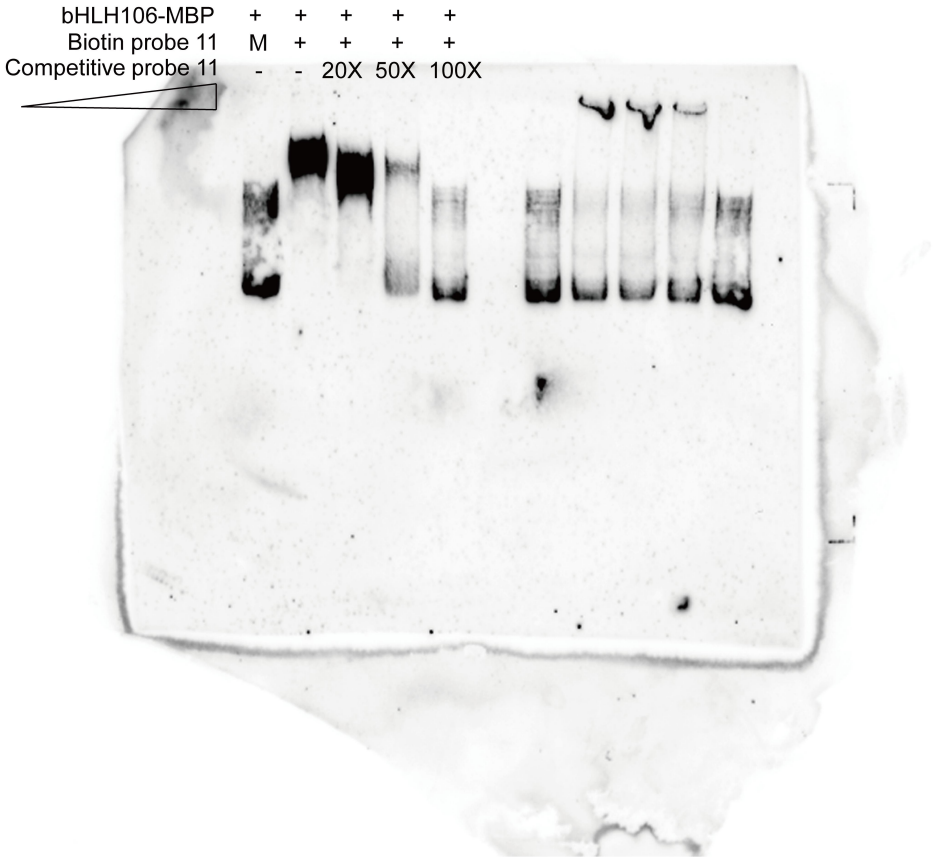



**Supplementary Fig. 4: The full and uncropped blot image of Fig. 7g.**
The binding of bZIP1664 protein to the promoters of *AtCAT3* as assessed using EMSA. M: mutant probe was the promoter of *AtActin3*.



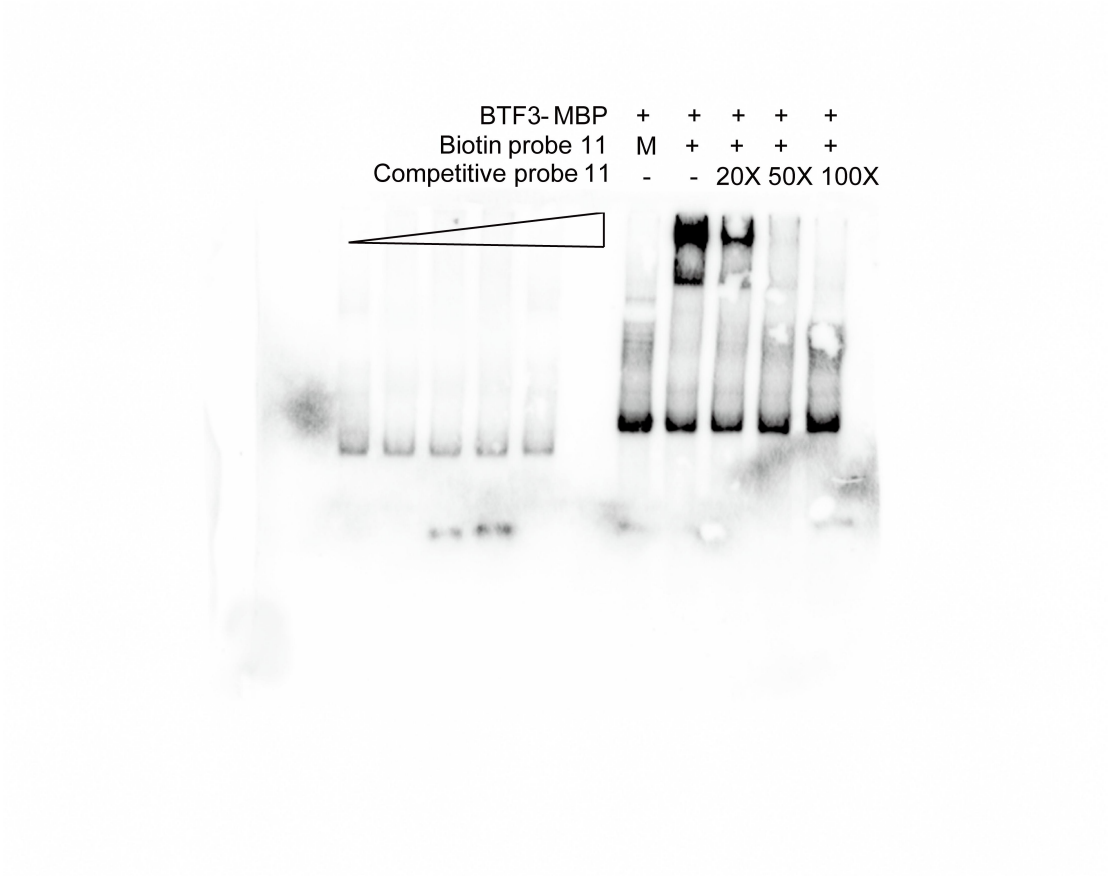

**Supplementary Fig. 5: The full and uncropped blot image of Fig. 7h.**

The binding of TEM1 protein to the promoters of *AtCAT3* as assessed using EMSA. M: mutant probe was the promoter of *AtActin3*.



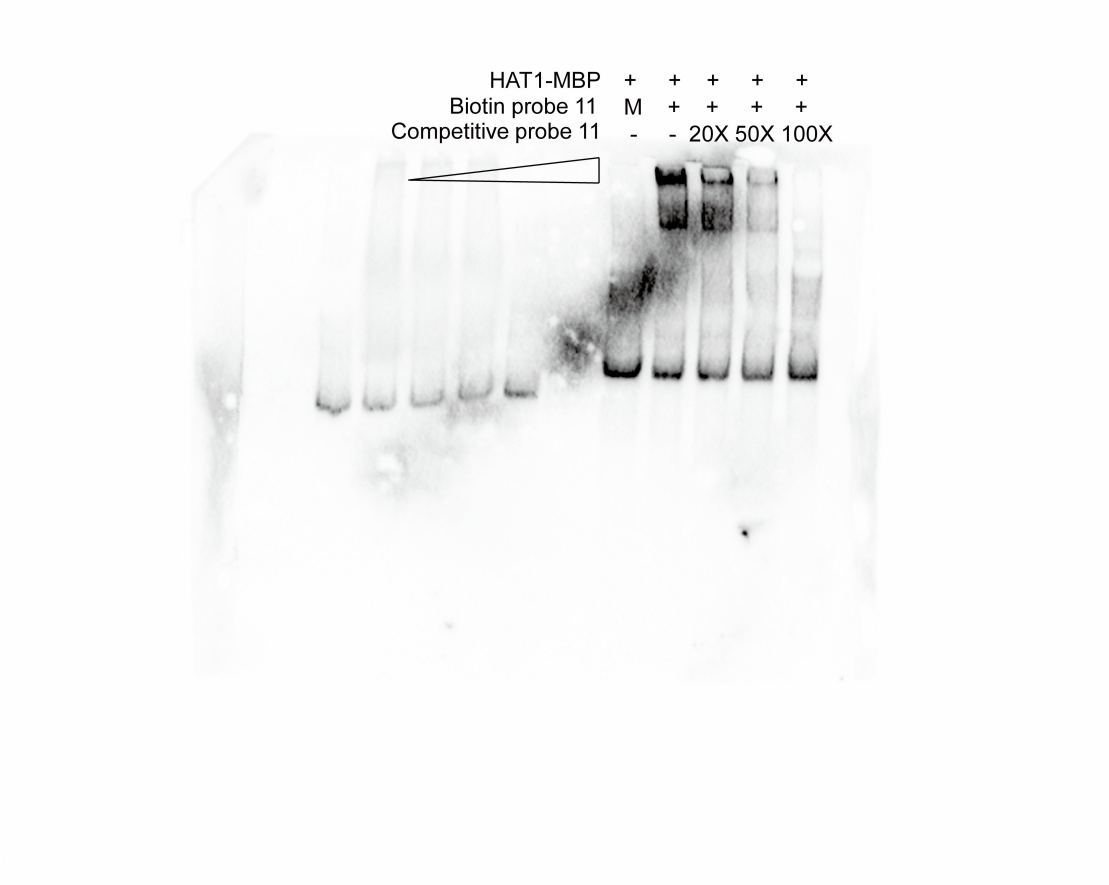

**Supplementary Fig. 6: The full and uncropped blot image of Fig. 7i.**

The binding of bHLH106 protein to the promoters of *AtCAT3* as assessed using EMSA. M: mutant probe was the promoter of *AtActin3*.




**Supplementary Fig. 7: The full and uncropped blot image of Fig. 7j.**

The binding of BTF3 protein to the promoters of *AtCAT3* as assessed using EMSA. M: mutant probe was the promoter of *AtActin3*.




**Supplementary Fig. 8: The full and uncropped blot image of Fig. 7k.**

The binding of HAT1 protein to the promoters of *AtCAT3* as assessed using EMSA. M: mutant probe was the promoter of *AtActin3*.