

Supplementary Information

Figure S1. (a) The nucleotide sequence of 666-bp open reading frame encoding MpCHI; (b) Agrose (1%) gel picture shows the 666-bp *MpCHI* band obtained by PCR. Lane 1, *MpCHI*; Lane 2, DNA molecular standard marker.

(a)

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ATGGCATCCATAACCGCAGTCCAGGTGGAGAACCTTGAGTTCCCATCGGTGATTACCTCTTCAGCCTCCGGCAAAA  
CCTATTTCTCGGCGGCGCAGGGGTGAGGGGGTTGACGATTGAGGGGAACTTCATAAAGTTCACAGGCATAGGAG  
TATACTTGGAAGATAAAGCGGTGGCATCACTCGCCACCAAGTGGAAGGGTAAGACTTCAGAACAGTTGGTAGAGG  
CCATCGACTTCTTCAGAGATATCATTTCAAGGCCATTTGAAAAGCTAATTCGAGGGTCCAAAATCAGAGAGTTGAG  
TGGGCCGGAGTATTCAAAGAAGGTGATCGAAAATTCCGTGGCCCACATGAAATCAGTTGGGACTTACGGCGATGC  
TGAAGCCGCGCAATTGAAAAATTTGCCAAGCCTTCAAGCCTGTCAACTTTCCCCGGGTGCCTCTGTTTTCTAC  
AGGCAATCACCCGATGGAATCTTGGGGCTTAGCTTCTCTCAAGACGCAACATTGCCAGAAAATGAGGCAGCAGTTA  
TAGAGAACAAAGCTATGTCAGAGGCAGTGTGGAGACCATGATTGGGGAAACACGCTGTTTCCCCTGATTTGAAAC  
GCAGTTTGGCTTCAAGGTTCCCTGCCGTATTGAGCGAGGGCGTTTACAAGATTGGCAACTGA
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(b)

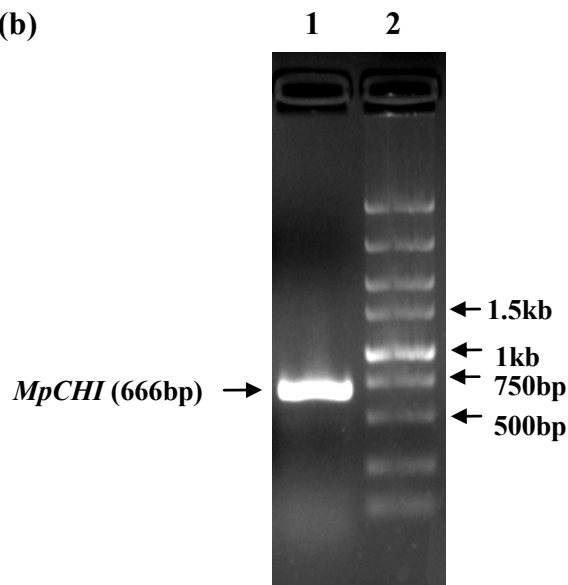


Figure S2. MpCHI could not improve the salt tolerance of yeast $\Delta hog1$ mutant. Picture was photographed 2 days after NaCl treatment. Up wild-type (WT) yeast transformants were set as control. WT + pYES2: empty vector transformed WT yeast control; WT + pYES2-MpCHI: pYES2-MpCHI transformed WT yeast; $\Delta hog1$ + pYES2: empty vector transformed $\Delta hog1$ control; $\Delta hog1$ + pYES2-MpCHI: pYES2-MpCHI transformed $\Delta hog1$ yeast.

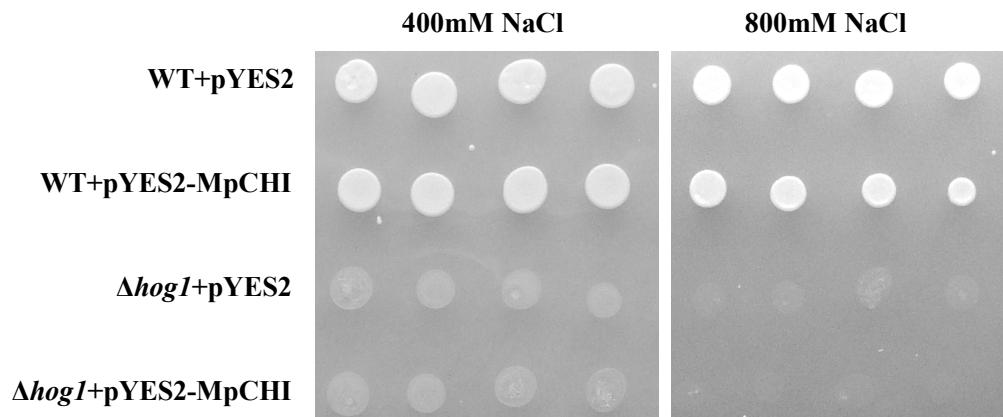


Figure 3. The MpCHI mRNA expression in yeast transformants were confirmed by RT-PCR. Bottom, yeast ACT1. Lane 1, blank control; Lane 2–5, yeast cultured in SC medium with glucose as carbon source; Lane 6–9, yeast cultured in SC medium with galactose as carbon source; Lane 10–13, yeast cultured in SC medium with galactose as carbon source and supplied with 500 mM NaCl; Lane 2, 6 and 10 are pYES2-vector transformed $\Delta nha1$; Lane 3, 7 and 11 are pYES2-MpCHI transformed $\Delta nha1$; Lane 4, 8 and 12 are pYES2-vector transformed $\Delta nhx1$; Lane 5, 9 and 13 are pYES2-MpCHI transformed $\Delta nhx1$.

