

# *CmoNST1* 基因 C 端截短导致南瓜裸仁表型

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## C-terminal Truncation of *CmoNST1* Leads to Hull-less Seeds in *Cucurbita moschata* Duch.

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附表 1 试验所用引物信息

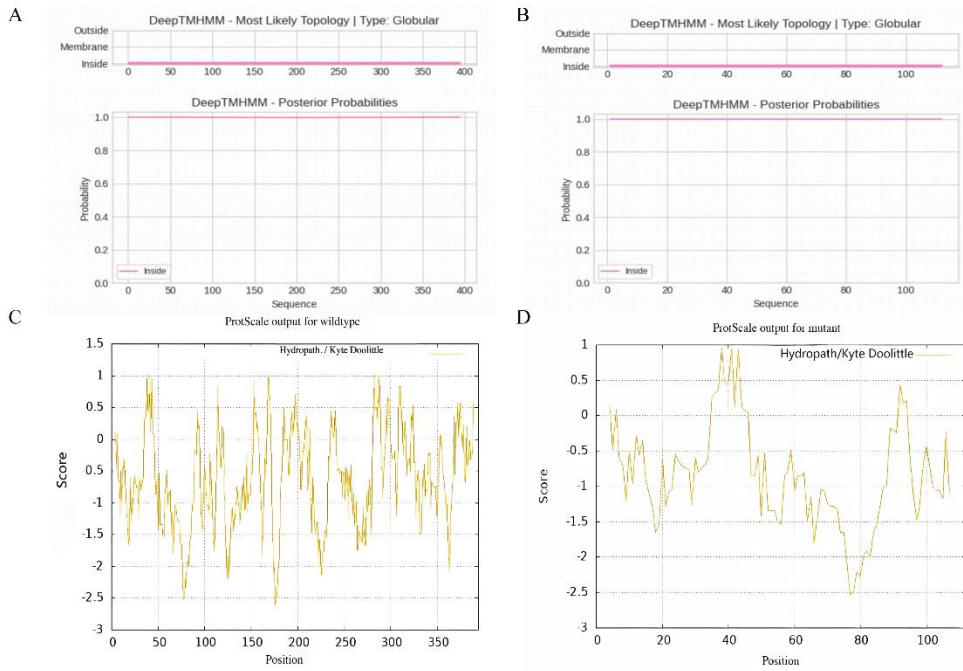
Supplementary table 1 Information for the primers used in the experiment

Primer	Sequence (5'-3')	Applications
<i>CmoNST1</i> -G-F	ACAACACGGAAATGGGTCCATA	Gene cloning
<i>CmoNST1</i> -G-R	TTCATCACATACGTAAATATTTAATTAATTAATTAATAACCTTG	
<i>CmoNST1</i> -C-F	ACCCAAATGAGTATCTCCGTGAA	CDS cloning
<i>CmoNST1</i> -C-R	GACGACAGGGATGACGACAACCTT	
R-790-F	ACCCAAATGAGTATCTCCGTGAA	Real-time fluorescence quantitative PCR
R-790-R	TCTTGCGGAGGTAGTAGTGGAGG	
<i>CmoActin</i> -F	AAAGGCAGAGTATGATGAGTCTGG	Internal reference gene for RT-qPCR
<i>CmoCh04G027660</i> -F		
<i>CmoActin</i> -R	GTCTCGGCAACCAACTCCA	
<i>CmoCh04G027660</i> -R		
CsaV3_6G008900-QC1	CTGGCGAAAGGGGATGTGCTGCAA	Target primers
CsaV3_6G008900-QC2	GCCATTTGTCTGCAGAATTG	

附表 2 代表性的生物信息学在线分析平台汇总

Supplementary table 2 Summary of representative bioinformatics online analysis platforms

Website	Purpose
ProtParam( <a href="https://web.expasy.org/protparam">https://web.expasy.org/protparam</a> )	Physicochemical property prediction
ProtScale( <a href="https://web.expasy.org/protscale">https://web.expasy.org/protscale</a> )	Hydrophilic/hydrophobic prediction
TMHMM( <a href="https://services.healthtech.dtu.dk/service.php/DeepTMHMM-1.0">https://services.healthtech.dtu.dk/service.php/DeepTMHMM-1.0</a> )	Transmembrane domain prediction
SignalP 6.0 Server( <a href="https://services.healthtech.dtu.dk/services/SignalP-6.0/">https://services.healthtech.dtu.dk/services/SignalP-6.0/</a> )	Signal peptide prediction
NetPhos3.1( <a href="https://services.healthtech.dtu.dk/services/NetPhos-3.1/">https://services.healthtech.dtu.dk/services/NetPhos-3.1/</a> )	Phosphorylation site prediction
NCBI( <a href="https://www.ncbi.nlm.nih.gov/Structure/cdd/wrpsb.cgi">https://www.ncbi.nlm.nih.gov/Structure/cdd/wrpsb.cgi</a> )	Domain prediction
SOPMA( <a href="https://npsa.lyon.inserm.fr/cgi-bin/npsa_automat.pl?page=/NPSA/npsa_sopma.html">https://npsa.lyon.inserm.fr/cgi-bin/npsa_automat.pl?page=/NPSA/npsa_sopma.html</a> )	Secondary structure prediction
SWISS-MODEL( <a href="https://swissmodel.expasy.org/">https://swissmodel.expasy.org/</a> )	Tertiary structure prediction

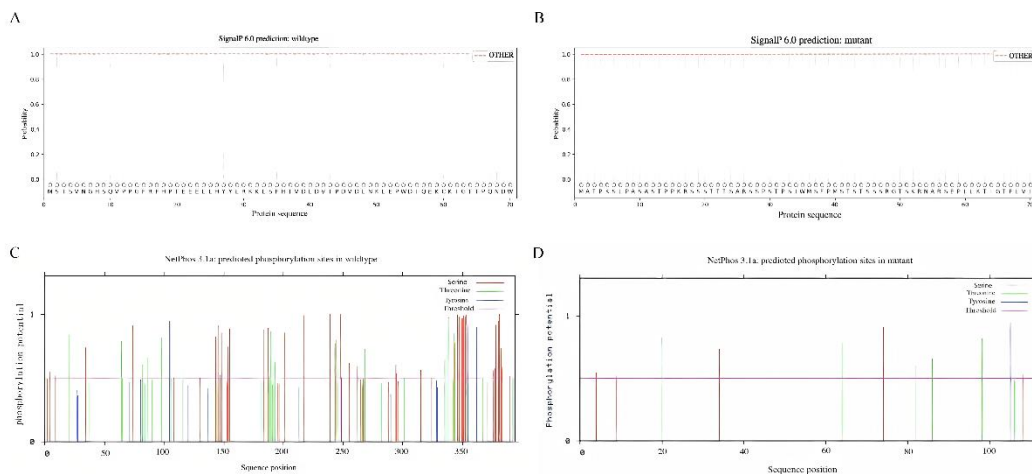


A: CmoNST1 蛋白跨膜结构预测; B: Cmonst1 蛋白跨膜结构预测; C: CmoNST1 蛋白亲疏水性预测; D: Cmonst1 蛋白亲疏水性预测

A: Transmembrane structure prediction of CmoNST1 protein; B: Transmembrane structure prediction of Cmonst1 protein; C: Hydrophilic and hydrophobic prediction of CmoNST1 protein; D: Hydrophilic and hydrophobic prediction of Cmonst1 protein

附图 1 CmoNST1 和 Cmonst1 蛋白跨膜结构和亲疏水性预测

Supplementary figure 1 Prediction of transmembrane structure, hydrophilic and hydrophobic in CmoNST1 and Cmonst1 proteins

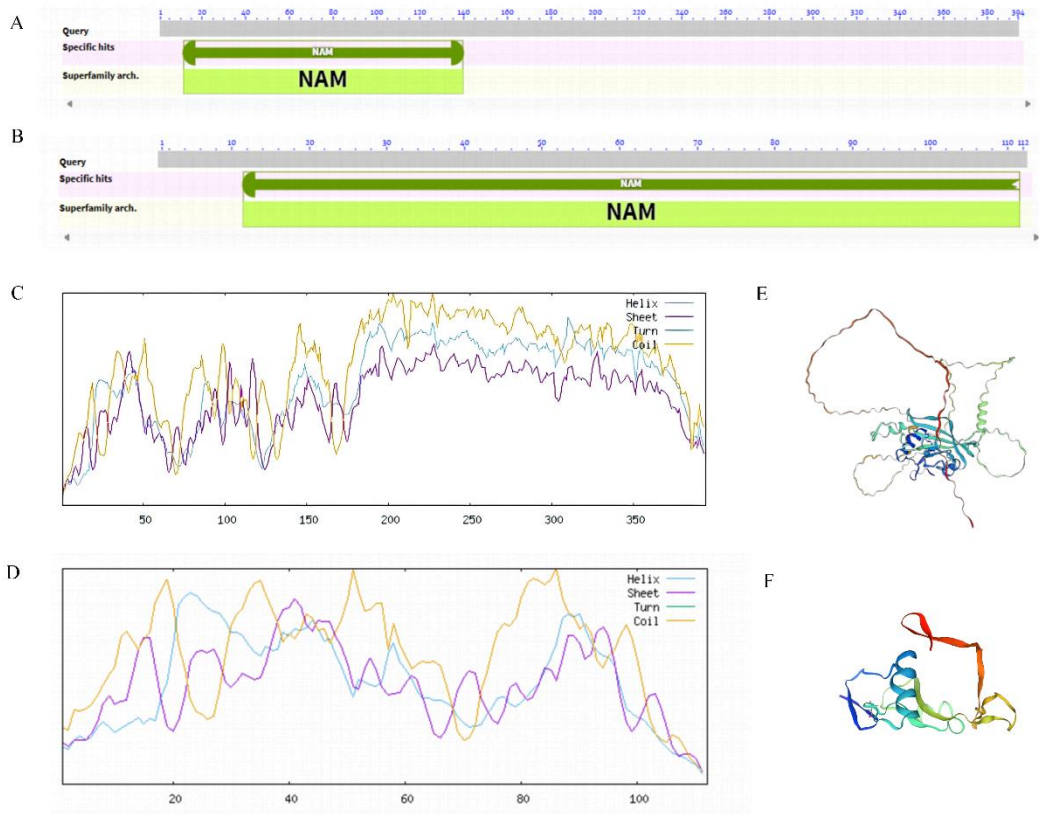


A: CmoNST1 蛋白信号肽预测; B: Cmonst1 蛋白信号肽预测; C: CmoNST1 蛋白磷酸化位点预测; D: Cmonst1 蛋白磷酸化位点预测

A: Prediction of signal peptide of CmoNST1 protein; B: Prediction of signal peptide of Cmonst1 protein; C: Prediction of phosphorylation sites of CmoNST1 protein; D: Prediction of phosphorylation sites of Cmonst1 protein

附图 2 CmoNST1 和 Cmonst1 蛋白信号肽和磷酸化位点预测

Supplementary figure 2 Prediction of signal peptide and hydrophobicity site in CmoNST1 and Cmonst1 proteins



A: CmoNST1 的保守区域; B: Cmonst1 的保守区域; C: CmoNST1 蛋白的二级结构预测; D: Cmonst1 蛋白的二级结构预测; E: CmoNST1 蛋白的三级结构预测; F: Cmonst1 蛋白的三级结构预测

A: Conserved regions of CmoNST1; B: Conserved regions of Cmonst1; C: Predicted secondary structure of CmoNST1; D: Predicted secondary structure of Cmonst1; E: Tertiary structure prediction of CmoNST1; F: Predicted tertiary structure of Cmonst1

附图 3 CmoNST1 和 Cmonst1 蛋白保守区域及二级结构、三级结构预测

Supplementary figure 3 Prediction of the conserved regions, secondary and tertiary structures of CmoNST1 and Cmonst1 proteins