

**Appendix A.** Primers used to construct of GmProT1 and GmProT2 plant expression vector and transgenic plants detection

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**Gene sequence of primer pairs (5'-3')**

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*GmPr* F:

*oT1* GGGGACAAGTTGTACAAAAAAAGCAGGCTTCATGACGCTGATTCC  
AAT

R:

GGGGACCACTTGTACAAGAAAGCTGGGTCAATAGCGTTTG  
AC

*GmPr* F:GGGGACAAGTTGTACAAAAAAAGCAGGCTTCATGACGCTGATT

*oT2* CCGAT

R:GGGGACCACTTGTACAAGAAAGCTGGGTCTAAATCCGAAAAAA  
CATG

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Black underscore represents *attB* site

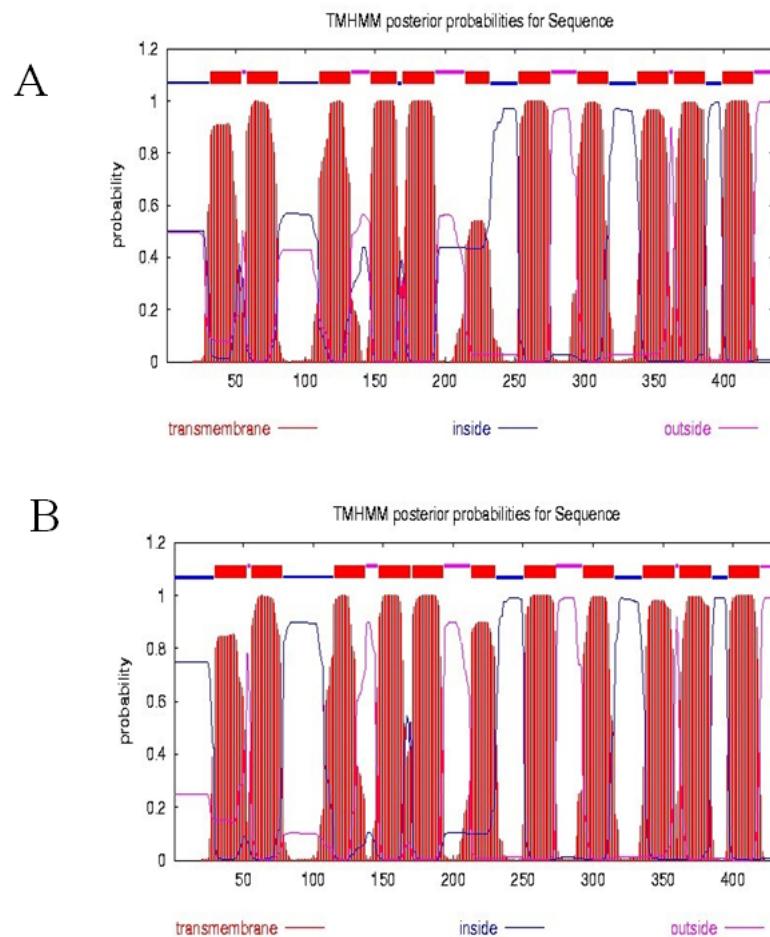
**Appendix B. Primers used to isolate the *GmProT1* and *GmProT2* genes**

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Gene	Locus ID	Sequence of primer pair (5'-3')
<i>GmProT1</i>	Glyma14G063200	ACATGACGCTGATTCCA/ CCCACAAACCATCAACATTA
<i>GmProT2</i>	Glyma02G253200	ACATGACGCTGATTCCG/ GGGGACTAGCATTAGAATTACTGA

### Appendix C. Analysis of membrane-spanning regions of GmProT1(A) and GmProT2

(B)



**Appendix D. Quantification of *GmProT* expression in four representative lines by real time PCR.**

