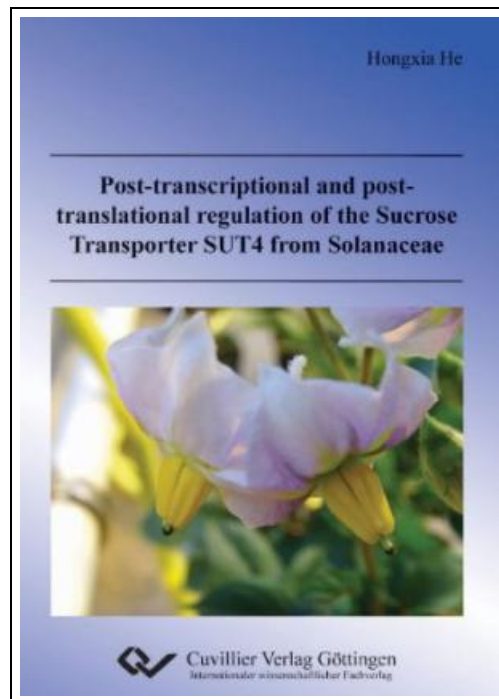


## Post-transcriptional and post-translational regulation of the Sucrose Transporter SUT4 from Solanaceae



Filesize: 9.06 MB

### ***Reviews***

*A very amazing publication with perfect and lucid information. We have read through and that i am certain that i will planning to study once more yet again in the future. You will not really feel monotony at anytime of the time (that's what catalogues are for about should you question me).*

*(Matilda Hoeger V)*

## POST-TRANSCRIPTIONAL AND POST-TRANSLATIONAL REGULATION OF THE SUCROSE TRANSPORTER SUT4 FROM SOLANACEAE



To read **Post-transcriptional and post-translational regulation of the Sucrose Transporter SUT4 from Solanaceae** PDF, you should access the web link below and save the ebook or gain access to additional information which are related to POST-TRANSCRIPTIONAL AND POST-TRANSLATIONAL REGULATION OF THE SUCROSE TRANSPORTER SUT4 FROM SOLANACEAE book.

Cuvillier Verlag Mai 2010, 2010. Taschenbuch. Condition: Neu. Neuware - Sucrose Transporters (SUTs, also called Sucrose Carriers-SUCs) are membrane proteins, located in the plasma membrane that function in loading sucrose into phloem (specialized vascular tissue) and in sucrose uptake into sink cells. This study aims to investigate more aspects of physiological functions of sucrose transporters in solanaceae plants. There are three subfamilies of sucrose transporters (SUT1, SUT2 and SUT4) have been identified from *Solanum tuberosum* and *Solanum lycopersicon*. Genetic and biochemical evidences have established that SUT1-type proteins function in phloem loading, but the phloem specific role of SUT2 and SUT4 proteins still needs further elucidation. A series of detailed analyses of sucrose transporter mRNAs mobility and stability have been performed in this study. Parasitic and graft experiments show that SUT1 mRNAs including (StSUT1, NtSUT1, SISUT1 and SoSUT1) are phloem mobile; relative analysis with the help of transcriptional and translational inhibitor show that, SUT1 mRNA stability is mainly regulated at the transcriptional level, whereas SUT2 and SUT4 mRNA stability is mainly regulated at the post-transcriptional level. The differential regulations show that members of the SUT2 and SUT4 family are obviously subject of a different regulatory network as described for sucrose transporters belonging to the SUT1 subfamily. In order to clarify relative physiological functions of SUT2 and SUT4 subfamilies, StSUT2 & StSUT4-RNAi potato plants were generated in this work. In addition, SISUT4 over-expressed tobacco plants were produced and the molecular and phenotypical characters of these transgenic plants illuminated that SUT4 might serve as an inhibitor of SUT1. Bimolecular fluorescence complementation (BiFC) is used to confirm SUT4 protein-protein interaction partners. Yeast three-hybrid system is employed to identify StSUT4 RNA binding protein(s) from *Solanum tuberosum* cDNA library. Several putative interaction partners are found in two independent screens. Further investigation has showed that only one...

 [Read Post-transcriptional and post-translational regulation of the Sucrose Transporter SUT4 from Solanaceae Online](#)

 [Download PDF Post-transcriptional and post-translational regulation of the Sucrose Transporter SUT4 from Solanaceae](#)

## You May Also Like



**[PDF] The Three Little Pigs - Read it Yourself with Ladybird: Level 2**

Click the hyperlink beneath to get "The Three Little Pigs - Read it Yourself with Ladybird: Level 2" document.

[Save Document »](#)



**[PDF] Games with Books : 28 of the Best Childrens Books and How to Use Them to Help Your Child Learn - From Preschool to Third Grade**

Click the hyperlink beneath to get "Games with Books : 28 of the Best Childrens Books and How to Use Them to Help Your Child Learn - From Preschool to Third Grade" document.

[Save Document »](#)



**[PDF] The Preschool Church Church School Lesson for Three to Five Year Olds by Eve Parker 1996 Paperback**

Click the hyperlink beneath to get "The Preschool Church Church School Lesson for Three to Five Year Olds by Eve Parker 1996 Paperback" document.

[Save Document »](#)



**[PDF] Games with Books : Twenty-Eight of the Best Childrens Books and How to Use Them to Help Your Child Learn - from Preschool to Third Grade**

Click the hyperlink beneath to get "Games with Books : Twenty-Eight of the Best Childrens Books and How to Use Them to Help Your Child Learn - from Preschool to Third Grade" document.

[Save Document »](#)



**[PDF] Three Bavarian Dances, Op.27a: Study Score**

Click the hyperlink beneath to get "Three Bavarian Dances, Op.27a: Study Score" document.

[Save Document »](#)



**[PDF] Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .**

Click the hyperlink beneath to get "Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications ." document.

[Save Document »](#)