

Accepted Manuscript

Evolutionary analysis and structural characterization of *Aquilaria sinensis* sesquiterpene synthase in agarwood formation: a computational study

Yong Liu , Jingan Chen , Jieying Qian , Hao Lin , Ning Sun ,
Zunnan Huang

PII: S0022-5193(18)30379-5
DOI: <https://doi.org/10.1016/j.jtbi.2018.08.006>
Reference: YJTBI 9571



To appear in: *Journal of Theoretical Biology*

Received date: 25 April 2018
Revised date: 3 August 2018
Accepted date: 6 August 2018

Please cite this article as: Yong Liu , Jingan Chen , Jieying Qian , Hao Lin , Ning Sun , Zunnan Huang , Evolutionary analysis and structural characterization of *Aquilaria sinensis* sesquiterpene synthase in agarwood formation: a computational study, *Journal of Theoretical Biology* (2018), doi: <https://doi.org/10.1016/j.jtbi.2018.08.006>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- Analysis of evolutionary history showed that AsSTS diverged early in angiosperms
- New conserved motif (RXR) was predicted in AsSTS
- 23 positively selected sites and three positively selected branches were detected
- 403D, 412P, 470G and 538S were shown to affect the function and stability of AsSTS
- Three virtual mutants (D403R, G470Q and S538K) were evaluated to stabilize AsSTS

Download English Version:

<https://daneshyari.com/en/article/8876459>

Download Persian Version:

<https://daneshyari.com/article/8876459>

[Daneshyari.com](https://daneshyari.com)