

BESC - Transcriptional Regulator of Phosphoenolpyruvate Shunt between Shikimate and Glycolysis Pathways

Disclosure Number

201603647

Technology Summary

The transcriptional repressor functions as a modulator of PEP fate by repressing the shikimate pathway via transcriptional regulation. We also demonstrated that this transcriptional regulation forms the basis of the SA-JA/ET antagonism which plays a major role in the tradeoff between growth and immune responses in plants. Further, our results suggest that components of transcriptional regulation related to the glycolysis pathway post pyruvate biosynthesis are conserved between plants and humans and can regulate genes involved human/animal cancer development.

Inventor

MUCHERO, WELLINGTON
Biosciences Division

Licensing Contact

CALDWELL, JENNIFER T

UT-Battelle, LLC

Oak Ridge National Laboratory

Rm 137, Bldg 4500N6196

1 Bethel Valley Road

Oak Ridge, TN 37831

Office Phone: (865) 574-4180

E-Mail: CALDWELLJT@ORNL.GOV