

PRODUCT DATA SHEET

Code No.: BIA-F3087

Pack sizes: 1 mg, 5 mg

Synonyms : (Z)-Ferulic acid

Specifications

cis-Ferulic acid

CAS # : 1014-83-1

Molecular Formula : C₁₀H₁₀O₄

Molecular Weight : 194.2

Source : Synthetic

Appearance : White solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in methanol and DMSO.

Application Notes

Ferulic acid is a ubiquitous and fundamental metabolite in the plant kingdom and forms the building blocks of lignocelluloses. cis-Ferulic acid is the minor isomer of trans-ferulic acid formed by exposure to light and temperature. cis-Ferulic acid, but not trans-ferulic acid, acts as a plant growth stimulator in wheat coleoptiles. The concentration of cis-ferulic acid increases during germination of corn seeds, whereas the concentration of trans-ferulic acid decreases. Exogenous ferulic acid improves growth and phenolic and carotenoid content in tomatoes.

References

- Shubert T.A. & Kravchenko N.T. (1968). Physiological activity and cis-trans isomerism in a series of hydroxycinnamic acids. Fenol'nye soedineniya i ikh biologicheskie funktsii, materialy vsesoyuznogo simpoziuma po fenol'nym soedineniyam, 247.
- Shubert T.A. et al. (1969). Cis-trans isomers of ferulic acid during the germination of corn seeds. Fiziologiya rastenii (Moscow), 16, 308.
- 3. Gorni P.H. et al. (2021). Exogenous salicylic acid and ferulic acid improve growth, phenolic and carotenoid content in tomato. Hort. Sci., 35, 335.

For in vitro laboratory use only. Not for human or animal use.

Updated: 13 September 2024 © Copyright BioAustralis 2024