LKT Laboratories, Inc.

Ferulic Acid Methyl Ester

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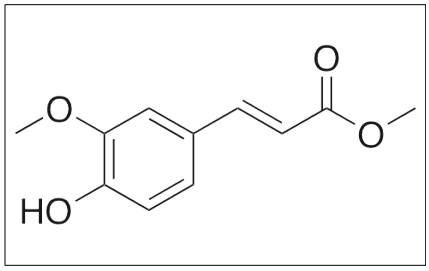
Product Information

Product ID F1670
CAS No. 2309-07-1
Chemical Name

Synonym



Formula $C_{11}H_{12}O_4$
Formula Wt. 208.21
Melting Point
Purity ≥98%
Solubility

Product ID	Size
F1670	1 g
F1670	5 g
F1670	25 g

Store Temp Ambient
Ship Temp Ambient

Description Ferulic acid is a metabolite of verbascoside and a hydroxycinnamic acid found in various plant sources that displays neuroprotective, antioxidative, anti-inflammatory, antidepressant, and antinociceptive activities. Ferulic acid decreases oxidative stress and inflammation, exhibiting therapeutic and protective effects in animal models of diabetic nephropathy. Ferulic acid protects against oxidative damage in cellular models by decreasing levels of IL-1ß and TNF-α and increasing levels of superoxide dismutase and glutathione. In animal models, this compound acts as an antinociceptive and antidepressant, decreasing levels of NE, DA, 5-HT, substance P, p65, and NF-κB in the hippocampus and frontal cortex. Ferulic acid displays potential benefit in the treatment of Alzheimer's disease as well, as it reverses morphological effects induced by amyloid-ß (Aß) dimers in *Paracentrotus lividus* embryos. Additionally, ferulic acid inhibits presynaptic glutamate release from cortical synaptosomes in rats through chelation of extracellular Ca2+ ions.

References

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