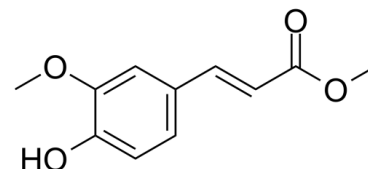


## Data Sheet

<b>Product Name:</b>	Ferulic acid methyl ester
<b>Cat. No.:</b>	CS-W019429
<b>CAS No.:</b>	2309-07-1
<b>Molecular Formula:</b>	C <sub>11</sub> H <sub>12</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	208.21
<b>Target:</b>	Autophagy; p38 MAPK
<b>Pathway:</b>	Autophagy; MAPK/ERK Pathway
<b>Solubility:</b>	DMSO : ≥ 100 mg/mL (480.28 mM); H <sub>2</sub> O : 2 mg/mL (9.61 mM); Need ultrasonic)



### BIOLOGICAL ACTIVITY:

Ferulic acid methyl ester (Methyl ferulate) is a derivative of ferulic acid, isolated from *Stemona tuberosa*, with anti-inflammatory and antioxidant properties<sup>[1][2]</sup>. Ferulic acid methyl ester is a cell membrane and brain permeable compound, shows free radical scavenging ability, used in the research of neurodegenerative disorders<sup>[1]</sup>. Ferulic acid methyl ester inhibits COX-2 expression, blocks **p-p38** and p-JNK in primary bone marrow derived-macrophages<sup>[2]</sup>. IC<sub>50</sub> & Target: p38<sup>[2]</sup> **In Vitro:** Ferulic acid methyl ester (25 µg/mL) has no cytotoxic effects on BMDMs after treatment for 6 h, 18 h, 48 h<sup>[2]</sup>.

Ferulic acid methyl ester (Methyl ferulate; 5, 10, 25 µg/mL) suppresses TNFα, IL6, IFNγ but not IL10, inhibits NO generation at 10 and 25 µg/mL, in primary bone marrow derived-macrophages (BMDMs)<sup>[2]</sup>.

Ferulic acid methyl ester (25 µg/mL) inhibits COX-2 expression, blocks p-p38 and p-JNK<sup>[2]</sup>.

### References:

[1]. Sultana R. Ferulic acid ethyl ester as a potential therapy in neurodegenerative disorders. *Biochim Biophys Acta*. 2012 May;1822(5):748-52.

[2]. Phuong NT, et al. Anti-inflammatory activity of methyl ferulate isolated from *Stemona tuberosa* Lour. *Asian Pac J Trop Med*. 2014 Sep;7S1:S327-31.

### CAIndexNames:

2-Propenoic acid, 3-(4-hydroxy-3-methoxyphenyl)-, methyl ester

### SMILES:

O=C(C=C/C1=CC=C(C(OC)=C1)O)OC

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA