Ethyl p-methoxycinnamate
Item No. 11740

CAS Registry No.: 24393-56-4
Formal Name: 3-(4-methoxyphenyl)-2E-propenoic acid, ethyl ester
Synonyms: EPMC, Ethyl 4-methoxycinnamate, Ethyl para-methoxycinnamate,
MF: C₁₂H₁₄O₃
FW: 206.2
Purity: ≥98%
UV/Vis.: ƛₘₐₓ 277, 310 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Ethyl p-methoxycinnamate (EPMC) is supplied as a crystalline solid. A stock solution may be made by dissolving the EPMC in the solvent of choice. EPMC is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of EPMC in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

EPMC is a natural product found in K. galanga and C. zedoaria extracts with anti-inflammatory, antiangiogenic, antifungal, larvicidal, and analgesic activities.1-4 It inhibits COX-1 and COX-2 in vitro (IC₅₀ = 1.12 and 0.83 μM, respectively) and reduces IL-1 and TNF-α production in vivo.3,6 EPMC inhibits granuloma tissue formation and acts as an analgesic, delaying tail flick time, in a dose-dependent manner in rats.4 It inhibits blood vessel growth in rat aortic explants (IC₅₀ = 91.9 μg/ml). EPMC (<10 μg/ml) also reduces growth of T. rubrum, A. niger, S. cerevisiae, and E. floccosum and is larvicidal (LC₅₀ = 53.64 ppm) against Ae. aegypti.1,2

References