PRODUCT INFORMATION

7-Ethoxyresorufin

Item No. 16122

CAS Registry No.: 5725-91-7
Formal Name: 7-ethoxy-3H-phenoxazin-3-one
Synonyms: 7-ER, 7-Ethoxyphenoxazone, Resorufin ethyl ether
MF: C_{14}H_{11}NO_{3}
FW: 241.2
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years
Special Conditions: Protect from light and moisture.

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

Laboratory Procedures

7-Ethoxyresorufin (7-ER) is supplied as a solid. A stock solution may be made by dissolving the 7-ER in the solvent of choice. 7-ER is soluble in organic solvents such as chloroform, DMSO, and dimethyl formamide, which should be purged with an inert gas.

Description

7-ER is a fluorometric substrate for and competitive inhibitor of cytochrome P450 1A1 (K_{m} ranges from 0.11-0.23 μM; IC_{50} = 0.1 μM).^{1-3} It has been used to study the metabolism of arachidonic acid (Item No. 90010) and the mechanisms of vasodilation.^{4,5} 7-ER also has been shown to inhibit nitric oxide synthesis by uncoupling neuronal nitric oxide synthase (K_{i} = 0.76 μM).^{6,7}

References