

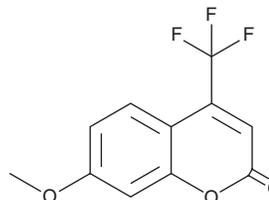
PRODUCT INFORMATION



7-Methoxy-4-(trifluoromethyl)coumarin

Item No. 34398

CAS Registry No.: 575-04-2
Formal Name: 7-methoxy-4-(trifluoromethyl)-2H-1-benzopyran-2-one
Synonym: MFC
MF: C₁₁H₇F₃O₃
FW: 244.2
Purity: ≥95%
UV/Vis.: λ_{max}: 334 nm
Ex./Em. Max: 410/510 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

7-Methoxy-4-(trifluoromethyl)coumarin is supplied as a solid. A stock solution may be made by dissolving the 7-methoxy-4-(trifluoromethyl)coumarin in the solvent of choice, which should be purged with an inert gas. 7-Methoxy-4-(trifluoromethyl)coumarin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of esomeprazole in these solvents is approximately 10, 25, and 30 mg/ml, respectively.

7-Methoxy-4-(trifluoromethyl)coumarin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 7-methoxy-4-(trifluoromethyl)coumarin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 7-Methoxy-4-(trifluoromethyl)coumarin has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

7-Methoxy-4-(trifluoromethyl)coumarin is a fluorogenic substrate for cytochrome P450s (CYPs).¹ Upon enzymatic cleavage by CYPs, 7-hydroxy-4-(trifluoromethyl)coumarin (HFC) is released and its fluorescence can be used to quantify CYP activity. HFC displays excitation/emission maxima of 410/510 nm, respectively.

Reference

1. Donato, M.T., Jiménez, N., Castell, J.V., *et al.* Fluorescence-based assays for screening nine cytochrome P450 (P450) activities in intact cells expressing individual human P450 enzymes. *Drug Metab. Dispos.* 32(7), 699-706 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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