

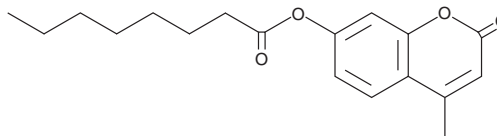
PRODUCT INFORMATION



4-Methylumbelliferyl Caprylate

Item No. 26802

CAS Registry No.: 20671-66-3
Formal Name: octanoic acid, 4-methyl-2-oxo-2H-1-benzopyran-7-yl ester
Synonyms: MUCAP, 4-MU Caprylate
MF: C₁₈H₂₂O₄
FW: 302.4
Purity: ≥98%
Ex./Em. Max: 320 and 360 nm at low (1.97-6.72) and high (7.12-10.3) pH, respectively/445 to 455 nm, increasing as pH decreases
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

4-Methylumbelliferyl caprylate (MUCAP) is supplied as a solid. A stock solution may be made by dissolving the MUCAP in the solvent of choice, which should be purged with an inert gas. MUCAP is soluble in the organic solvent chloroform.

Description

MUCAP is a fluorogenic substrate for C₈ esterase.¹ MUCAP is cleaved by C₈ esterase to release the fluorescent moiety 4-methylumbelliferyl (4-MU). 4-MU fluorescence is pH-dependent with excitation maxima of 320 and 360 nm at low (1.97-6.72) and high (7.12-10.3) pH, respectively, and an emission maximum ranging from 445 to 455 nm, increasing as pH decreases.²

References

1. Manafi, M. Fluorogenic and chromogenic enzyme substrates in culture media and identification tests. *Int. J. Food Microbiol.* **31(1-3)**, 45-58 (1996).
2. Zhi, H., Wang, J., Wang, S., *et al.* Fluorescent properties of hymecromone and fluorimetric analysis of hymecromone in compound dantong capsule. *J. Spectrosc.* **1(1)**, 147128 (2013).

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.

WARRANTY AND LIMITATION OF REMEDY

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM