

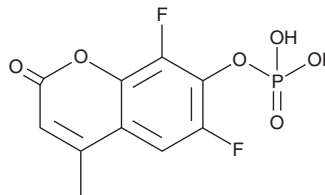
PRODUCT INFORMATION



DiFMUP

Item No. 35500

CAS Registry No.: 214491-43-7
Formal Name: 6,8-difluoro-4-methyl-7-(phosphonoxy)-2H-1-benzopyran-2-one
Synonym: 6,8-difluoro-4-Methylumbelliferyl phosphate
MF: C₁₀H₇F₂O₆P
FW: 292.1
Purity: ≥95%
Abs./Em. Max: 358/455 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

DiFMUP is supplied as a solid. A stock solution may be made by dissolving the DiFMUP in the solvent of choice, which should be purged with an inert gas. DiFMUP is soluble in DMSO.

Description

DiFMUP is a fluorogenic substrate for phosphatases.¹ Upon enzymatic cleavage by phosphatases, 6,8-difluoro-7-hydroxy-4-methylcoumarin (Item No. 36017) is released, which has an absorption/emission maxima of 358/455 nm, respectively, and its fluorescence can be used to quantify phosphatase activity.² DiFMUP has been used to detect alkaline phosphatase in isolated rat tibia bone tissue.

References

1. Gee, K.R., Sun, W.C., Bhalgat, M.K., *et al.* Fluorogenic substrates based on fluorinated umbelliferones for continuous assays of phosphatases and β -galactosidases. *Anal. Biochem.* **273(1)**, 41-48 (1999).
2. Gade, T.P., Motley, M.W., Beattie, B.J., *et al.* Imaging of alkaline phosphatase activity in bone tissue. *PLoS One* **6(7)**, e22608 (2011).

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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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