

Product Data Sheet

Product Name: Pantothenate-AMC

Cat. No.: GC91982

Chemical Properties

Cas. No. 1224691-12-6

Chemical Name (2R)-2,4-dihydroxy-3,3-dimethyl-N-[3-[(4-methyl-2-oxo-2H-1-benzopyran-7-yl)amino]-3-oxopropyl]-butanamide

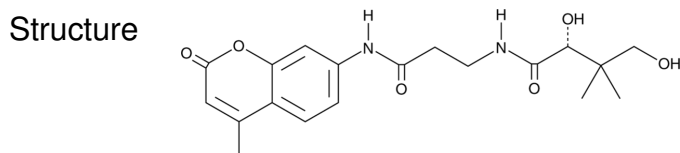
SMILES CC(C1=CC=C(NC(CCNC([C@H](O)C(C)(C)CO)=O)=O)C=C1O2)=CC2=O

Formula $C_{19}H_{24}N_2O_6$ M.Wt 376.4

Solubility Acetonitrile: Slightly soluble: 0.1-1 mg/ml, DMSO: Sparingly soluble: 1-10 mg/ml, Water: Slightly soluble: 0.1-1 mg/ml
Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.



Background

Pantothenate-AMC is a fluorogenic substrate for vanin-1, an enzyme involved in the recycling of L-pantothenic acid.¹ Upon enzymatic cleavage by vanin-1, 7-amino-7-methylcoumarin (AMC) is released and its fluorescence can be used to quantify vanin-1 activity. AMC displays excitation/emission maxima of 340-360/440-460 nm, respectively.

References:

[1]. Ruan, B.H., Cole, D.C., Wu, P., et al. A fluorescent assay suitable for inhibitor screening and vanin tissue quantification. *Anal. Biochem.* 399(2):284-292 (2010).

Caution: Product has not been fully validated for medical applications. For research use only.

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