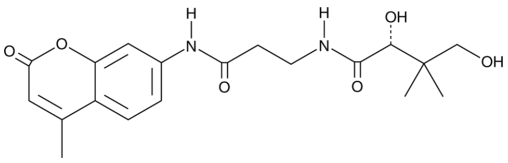
# Product Data Sheet

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. | | |
| Structure |  | | |

## 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 quantificationAnal. Biochem.399(2)284-292(2010).

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