

Product Data Sheet

Product Name: Naphthofluorescein

Cat. No.: GC44313

Chemical Properties

Cas. No. 61419-02-1

SMILES [Na].[Na].Oc1ccc2c(ccc3c2Oc2c4ccc(O)cc4ccc2C23OC(=O)c3ccccc23)c1

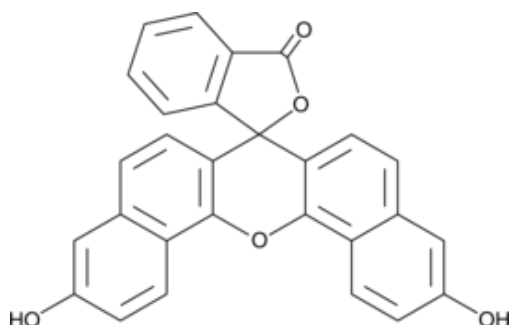
Formula C₂₈H₁₆O₅ M.Wt 432.4

Solubility DMF: 10 mg/ml, DMF:PBS (pH 7) (1:10): 0.09 mg/ml, DMSO: 3 mg/ml, Ethanol: 2 mg/ml
Storage Store at -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

Furin is a proprotein convertase, converting precursor proteins to functional proteins within the Golgi/trans-Golgi secretory pathway. Naphthofluorescein is a cell-permeable inhibitor of furin (IC₅₀ = 12 μM). It inhibits furin-mediated cleavage of the pro-form of membrane type-1 matrix metalloproteinase (MT1-MMP), resulting in decreased levels of active MT1-MMP. This, in turn, suppresses MMP-2 activation and reduces cell motility in CHO cells expressing proMT1-MMP. Naphthofluorescein significantly inhibits the invasion of Matrigel by the human fibrosarcoma cell line, HT1080. The effects of this furin inhibitor on other furin-mediated processes, in vivo or in vitro, remain to be determined.

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

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