

CycLuc1

Chemical Properties

CAS No. : 1247879-16-8

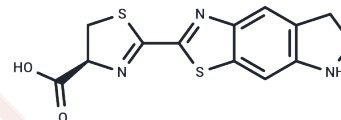
Formula: C₁₃H₁₁N₃O₂S₂

Molecular Weight: 305.38

Keep away from direct sunlight

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	CycLuc1, a brain-penetrant luciferase substrate, may be a superior BLI substrate compared to D-luciferin for monitoring tumor growth in intracranial GBM (glioblastoma) xenografts.
Targets(IC50)	Others, Reactive Oxygen Species, ROS
Animal Research	CycLuc1 for in vivo bioluminescence imaging of cardiovascular brain regions Procedures 1. Mice were anesthetized with isoflurane, CycLuc1 (5, 7.5, and 15 mg/kg) was intraperitoneally injected into the mice, and single bioluminescence images were acquired with an exposure time of 60 seconds 10 minutes after administration. 2. Continuous images were acquired at an exposure of 1,500 ms.

Solubility Information

Solubility	DMSO: 83.33 mg/mL (272.87 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 3.3 mg/mL (10.81 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2746 mL	16.373 mL	32.7461 mL
5 mM	0.6549 mL	3.2746 mL	6.5492 mL
10 mM	0.3275 mL	1.6373 mL	3.2746 mL
50 mM	0.0655 mL	0.3275 mL	0.6549 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Simonyan H, et al. A synthetic luciferin improves in vivo bioluminescence imaging of gene expression in cardiovascular brain regions. *Physiol Genomics*. 2016 Oct 1;48(10):762-770.

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