Lucigenin

Catalog No.C12243 Batch:C1224303

Product Datasheet

Technical Data

Formula	$C_{28}H_{22}N_4O_6$					
Molecular Weight	510.5	**CAS No.**	2315-97-1			
Solubility (25°C)*	In vitro	DMSO	20 mg/mL (39.17 mM)			
		Water	Insoluble			
		Ethanol	Insoluble			
	In vivo (Add solvents to the product individually and in order)	Oral Administration	Homogeneous suspension	CMC-NA	≥5mg/ml	Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml.

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Concentration \ Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.9589 mL	9.7943 mL	19.5886 mL
5 mM	0.3918 mL	1.9589 mL	3.9177 mL
10 mM	0.1959 mL	0.9794 mL	1.9589 mL
50 mM	-	-	-

Biological Activity

Description	Lucigenin (NSC-151912, L-6868) is a fluorescent probe that exhibits a bluish-green fluorescence in the presence of endogenously generated **superoxide anion radicals** and **chloride** in cells.
Targets	superoxide anion radical [1] | chloride [1]
In vitro	1.1 Preparation of the stock solution Dissolve 1 mg of Lucigenin in 0.1919 mL of DMSO to obtain 10 mM of this compound. Note: It is recommended to store the stock solution at -20 °C -80 °C away from light and avoid repetitive freeze-thaw cycles. 1.2 Preparation of this compound working solution Dilute the stock solution in serum-free cell culture medium or PBS to obtain 5-10 μM of this chemical working solution. Note: Please adjust the concentration of this chemical working solution according to the actual situation. Cell staining 2.1 Cell preparation. For suspension cells: Centrifuge at 1000 g at 4°C for 3-5 minutes and then discard the supernatant. Wash twice with PBS, 5 minutes each time. For adherent cells: Discard the cell culture medium, and add trypsin to dissociate cells to make a single-cell suspension. Centrifuge at 1000 g at 4°C for 3-5 minutes and then discard the supernatant. Wash twice with PBS, 5 minutes each time. 2.2 Add 1 mL of this compound working solution, and then incubate at room temperature for 15 minutes. 2.3 Centrifuge at 400 g at 4°C for 3-4 minutes and then discard the supernatant. 2.4 Wash twice with PBS, 5 minutes each time. 2.5 Resuspend cells with serum-free cell culture medium or PBS, and then detect by fluorescence microscope.

References

https://pubmed.ncbi.nlm.nih.gov/9442038/

RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

EU Headquarters
Gajeva ulica 28, HR-10000 Zagreb, Croatia

US Headquarters
12222 Merit Dr STE 130 Dallas, Texas, 75251

UK Headquarters
121 ABILITY HOUSE, BROOKER ROAD, EN9 1JH, ESSEX

Orders: Sales@capsidbio.com
Enquiries: info@capsidbio.com
www.capsidbio.com