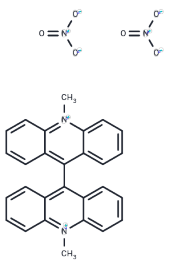
Data Sheet (Cat.No.T19023)

TargetMol

Lucigenin

Chemical Properties



CAS No. : 2315-97-1

Formula: C28H22N4O6

Molecular Weight: 510.5

Appearance: no data available

Storage: keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Lucigenin (NSC-151912) (L-6868) is a chemiluminescent probe used to indicate the presence of endogenously generated superoxide anion radicals in cells.
Targets(IC50)	Others
In vitro	Upon single-electron reduction of Lucigenin by a radical species the subsequent form of Lucigenin presents amplified chemiluminescence which is measurable and can be correlated to the respective amount of reactive radical species present in the system. In addition to indicating the presence of radicals in cells, Lucigenin shows interaction with redox-active oxidoreductase enzymes. Lucigenin is shown to mediate the reduction of cytochrome C by xanthine oxidase and to increase the rate of NADPH oxidation.

Solubility Information

Solubility	DMSO: 80 mg/mL (156.71 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
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	0.0392 mL	0.1959 mL	0.3918 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.

Reference

Li Y, et al. Validation of lucigenin (bis-N-methylacridinium) as a chemilumigenic probe for detecting superoxide anion radical production by enzymatic and cellular systems. J Biol Chem. 1998 Jan 23;273(4):2015-23.
Rost M, et al. What do we measure with luminol-, lucigenin- and penicillin-amplified chemiluminescence? 1. Investigations with hydrogen peroxide and sodium hypochlorite. J Biolumin Chemilumin. 1998 Nov-Dec;13(6):355-63.

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