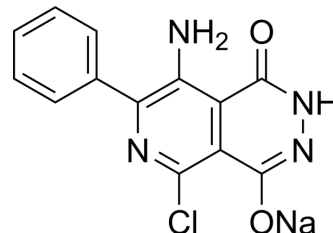


L 012 sodium salt

Cat. No.:	HY-108537
CAS No.:	143556-24-5
Molecular Formula:	C ₁₃ H ₈ ClN ₄ NaO ₂
Molecular Weight:	310.67
Target:	Reactive Oxygen Species
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
Storage:	4°C, stored under nitrogen, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (160.94 mM; Need ultrasonic)			
	H ₂ O : 3.33 mg/mL (10.72 mM; ultrasonic and warming and heat to 60°C)			
		Solvent Concentration	Mass	
			1 mg	5 mg
Preparing Stock Solutions	1 mM	3.2188 mL	16.0942 mL	32.1885 mL
	5 mM	0.6438 mL	3.2188 mL	6.4377 mL
	10 mM	0.3219 mL	1.6094 mL	3.2188 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.25 mg/mL (4.02 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.25 mg/mL (4.02 mM); Clear solution			

BIOLOGICAL ACTIVITY

Description	L 012 sodium salt a luminol-based chemiluminescent (CL) probe, is widely used in vitro and in vivo to detect NADPH oxidase (Nox)-derived superoxide (O ₂ ^{•-}) and identify Nox inhibitors ^[1] .
In Vitro	L-012 sodium salt, a chemical analog of luminol, gives rise to significantly higher luminescence yield and increased sensitivity as compared to other CL probes, lucigenin and MCLA ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	L-012 sodium salt is well distributed in the mouse body and mediates a strong ROS/RNS-dependent luminescent signal in vivo and is useful for monitoring the development and regulation of inflammation in living organisms ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Zielonka J, et al. On the use of L-012, a luminol-based chemiluminescent probe, for detecting superoxide and identifying inhibitors of NADPH oxidase: a reevaluation. *Free Radic Biol Med.* 2013;65:1310-1314.
- [2]. Kielland A, et al. In vivo imaging of reactive oxygen and nitrogen species in inflammation using the luminescent probe L-012. *Free Radic Biol Med.* 2009;47(6):760-766.
-

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA