Product Data Sheet

MLS-573151

Cat. No.: HY-113849 CAS No.: 10179-57-4 Molecular Formula: $C_{21}H_{19}N_3O_2S$ Molecular Weight: 377.46 Target: Ras

Pathway: GPCR/G Protein

Storage: Powder -20°C 3 years

2 years

-80°C In solvent 6 months

> -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (264.93 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.6493 mL	13.2464 mL	26.4929 mL
	5 mM	0.5299 mL	2.6493 mL	5.2986 mL
	10 mM	0.2649 mL	1.3246 mL	2.6493 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: ≥ 2.5 mg/mL (6.62 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.62 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.62 mM); Clear solution

BIOLOGICAL ACTIVITY

Description GTPases family members, such as Rab2, Rab7, H-Ras, Rac1, Rac 2 and RhoA wild-type. MLS-573151 acts by blocking the binding of GTP to Cdc42^{[1][2]}.

In Vitro

The fluorescence intensities of phagocytosed beads or bacteria in hemocytes, taken as a measure of phagocytosis efficiency, were markedly reduced in granulocytes treated with MLS-573151 (50 μM; for 15 min) compared to that in the control group. MLS-573151 could effectively inhibit the phagocytic ability of granulocytes^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

• Sci Adv. 2023 May 24;9(21):eadg1778.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Zurab Surviladze, et al. Identification of a small GTPase inhibitor using a high-throughput flow cytometry bead-based multiplex assay. J Biomol Screen. 2010 Jan;15(1):10-20.

[2]. Fan Mao, et al. Transcriptomic Evidence Reveals the Molecular Basis for Functional Differentiation of Hemocytes in a Marine Invertebrate, Crassostrea gigas. Front Immunol. 2020 May 27;11:911.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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