

ML334

Chemical Properties

CAS No. : 1432500-66-7

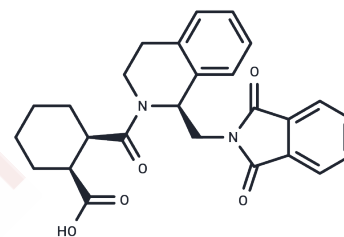
Formula: C₂₆H₂₆N₂O₅

Molecular Weight: 446.49

Store at low temperature

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	ML334 (LH601A) is a transmembrane and potent NRF2 activator that inhibits Keap1-NRF2 protein interactions to ameliorate myocardial infarction-induced cardiac fibrosis by inhibiting cardiac fibroblast activation and proliferation.
Targets(IC50)	Reductase,Nrf2
In vitro	Treatment of HEK293 cells with ML334 (LH601A; 50-100 μM; 6-16 hours) increases NQO1 and TRX1 mRNA levels by 2 to 3 times at both 6 and 16 hours. Additionally, at 6 hours, ML334 enhances HO-1 mRNA expression by 4 to 7 times, with a relatively smaller change in fold increase observed at 16 hours [2]. ML334 (LH601A; 50-100 μM; 16 hours; HEK293 cells) induces the expression of HO-1 and TRX1 proteins in HEK293 cells [2]. Furthermore, ML334 (LH601A) stimulates the expression and nuclear translocation of NRF2 in HEK293 cells [2].

Solubility Information

Solubility	DMSO: 30 mg/mL (67.19 mM),Sonication is recommended. Ethanol: 30 mg/mL (67.19 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: 5 mg/mL (11.2 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	2.2397 mL	11.1985 mL	22.3969 mL
5 mM	0.4479 mL	2.2397 mL	4.4794 mL
10 mM	0.224 mL	1.1198 mL	2.2397 mL
50 mM	0.0448 mL	0.224 mL	0.4479 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

Hu L, et al. Discovery of a small-molecule inhibitor and cellular probe of Keap1-Nrf2 protein-protein interaction. *Bioorg Med Chem Lett*. 2013 May 15;23(10):3039-43.

Wen X, et al. Activation of NRF2 Signaling in HEK293 Cells by a First-in-Class Direct KEAP1-NRF2 Inhibitor. *J Biochem Mol Toxicol*. 2015 Jun;29(6):261-6.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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