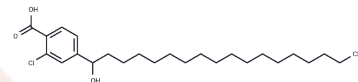


Lodelaben

Chemical Properties

CAS No. :	111149-90-7
Formula:	C ₂₅ H ₄₁ ClO ₃
Molecular Weight:	425.04
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Lodelaben (Declaben, SC-39026) is a reversible, non-competitive inhibitor of human neutrophil elastase (HNE), characterized by specificity and potency (IC ₅₀ =0.5 μM, K _i =1.5 μM).
Targets(IC ₅₀)	Serine Protease
In vitro	Lodelaben is a human neutrophil elastase inhibitor with IC ₅₀ and K _i 50 of 0.5 and 1.5 μM, respectively. Lodelaben can inhibit human neutrophil elastase (HNE) in a non-competitive manner. [1]
In vivo	<p>Methods: Lodelaben (SC-39026) (40 mg/kg, gavage, 8 days) was administered to male Sprague-Dawley rats 8 days after a single subcutaneous injection of monocrotaline (60 mg/kg) or saline. Thirteen days after injection, an indwelling cardiovascular catheter was inserted under pentobarbital anesthesia, and 15 days after injection, pulmonary and systemic hemodynamic measurements were recorded while the animals were awake, and at necropsy, the lungs were perfused and evaluated by light and electron microscopy using morphometric techniques.</p> <p>Results: Saline-injected rats given Lodelaben or vehicle were similar in all characteristics evaluated. In contrast, mean pulmonary artery pressure was significantly lower in monocrotaline rats injected with SC-39026 than in rats given vehicle (21.0 +/- 1.6 vs. 27.5 +/- 0.8 mm Hg, p less than 0.05), which was associated with a significant reduction in the number of muscularized arteries at the alveolar wall level (r² = 0.89, p less than 0.001).[3]</p>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3527 mL	11.7636 mL	23.5272 mL
5 mM	0.4705 mL	2.3527 mL	4.7054 mL
10 mM	0.2353 mL	1.1764 mL	2.3527 mL
50 mM	0.0471 mL	0.2353 mL	0.4705 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

Nakao A, et al. SC-39026, a specific human neutrophil elastase inhibitor. *Biochem Biophys Res Commun.* 1987 Sep 15;147(2):666-74.

Ilkiw R, et al. SC-39026, a serine elastase inhibitor, prevents muscularization of peripheral arteries, suggesting a mechanism of monocrotaline-induced pulmonary hypertension in rats. *Circ Res.* 1989 Apr;64(4):814-25.

Gossage JR, et al. Neutrophil elastase inhibitors, SC-37698 and SC-39026, reduce endotoxin-induced lung dysfunction in awake sheep. *Am Rev Respir Dis.* 1993 Jun;147(6 Pt 1):1371-9.

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