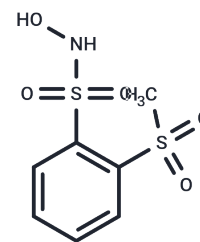


CXL-1020

Chemical Properties

CAS No. : 950834-06-7
 Formula: C₇H₉NO₅S₂
 Molecular Weight: 251.28
 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	CXL-1020, a nitroxyl (HNO) prodrug, enhances cardiac inotropy/lusitropy and Ca ²⁺ cycling in rats exhibiting abnormal relaxation, induces vasorelaxation, and augments cardiac function in canine models. It has been investigated for its potential in treating systolic and stable heart failure [1].
Targets(IC50)	Others, Calcium Channel
In vivo	CXL-1020, administered at a dosage of 100 µg/kg/min via a 30-minute infusion, significantly improves hemodynamics and cardiac functionality, enhancing both diastolic and systolic performance in mice [1]. Conversely, at dosages of 3 and 10 mg/kg/min through a 4-hour intravenous infusion, CXL-1020 elevates left ventricular systolic and diastolic functions in dogs suffering from advanced heart failure [2]. In an animal model using adult male Sprague-Dawley rats (250-350 g; with cardiac dysfunction induced by isoproterenol) [1], the administration of CXL-1020 at 100 µg/kg/min for 30 minutes noticeably improved hemodynamics and cardiac function in normal rats, and substantially boosted both diastolic and systolic performance in cardiac dysfunction mice. Similarly, in dogs with heart failure induced by coronary microembolization [2], dosages of 3 and 10 mg/kg/min resulted in a dose-dependent improvement in cardiac function, evidenced by a modest decrease in systolic aortic pressure (AoP), a significant increase in ejection fraction (EF) and early mitral inflow velocity deceleration time (DT), and a significant reduction in left ventricular end-systolic volume (ESV), end-diastolic pressure (EDP), and end-diastolic wall stress (EDWS).

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9796 mL	19.8981 mL	39.7962 mL
5 mM	0.7959 mL	3.9796 mL	7.9592 mL
10 mM	0.398 mL	1.9898 mL	3.9796 mL
50 mM	0.0796 mL	0.398 mL	0.7959 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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