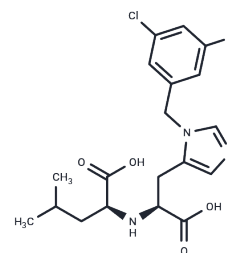


MLN-4760

Chemical Properties

CAS No. : 305335-31-3
 Formula: C₁₉H₂₃Cl₂N₃O₄
 Molecular Weight: 428.31
 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	MLN-4760 is an angiotensin-converting (ACE2) inhibitor (human ACE2; IC ₅₀ =0.44 nM). It also has excellent selectivity (>5000-fold) versus related enzymes including human testicular ACE (IC ₅₀ , >100 μM) and bovine carboxypeptidase A (CPDA; IC ₅₀ , 27 μM).
Targets (IC ₅₀)	RAAS, Angiotensin-converting Enzyme (ACE)
In vitro	MLN-4760 displays pIC ₅₀ at rhACE2 of 8.5±0.1 and at rhACE of 4.4±0.2. MLN-4760 also shows pIC ₅₀ at rhACE2 of 4.7±0.1, 6.9±0.1, and an ACE of 4.4±0.1, 6.2±0.1 in murine heart and mononuclear cells (MNCs), respectively. MLN-4760 potently quenches the cleavage of the 7-Mca-YVADAPK(Dnp) in rhACE2[2].
In vivo	MLN-4760 (100 μM, intracerebroventricular infusion for five days) significantly exacerbates neurological function at 4 hours and 3 days post-stroke, without a notable increase in infarct volume[3].

Solubility Information

Solubility	H ₂ O: < 1 mg/mL (insoluble or slightly soluble), 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: 2 mg/mL (4.67 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	2.3348 mL	11.6738 mL	23.3476 mL
5 mM	0.467 mL	2.3348 mL	4.6695 mL
10 mM	0.2335 mL	1.1674 mL	2.3348 mL
50 mM	0.0467 mL	0.2335 mL	0.467 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

Dales NA, et al. Substrate-based design of the first class of angiotensin-converting enzyme-related carboxypeptidase (ACE2) inhibitors. *J Am Chem Soc.* 2002 Oct 9;124(40):11852-3.

Joshi S, et al. Angiotensin converting enzyme versus angiotensin converting enzyme-2 selectivity of MLN-4760 and DX600 in human and murine bone marrow-derived cells. *Eur J Pharmacol.* 2016 Mar 5;774:25-33.

Bennion DM, et al. Activation of the Neuroprotective Angiotensin-Converting Enzyme 2 in Rat Ischemic Stroke. *Hypertension.* 2015 Jul;66(1):141-8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481