

Ixazomib citrate

Chemical Properties

CAS No. : 1239908-20-3

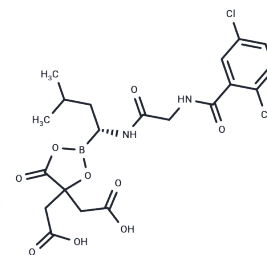
Formula: C₂₀H₂₃BCl₂N₂O₉

Molecular Weight: 517.12

Keep away from direct sunlight

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	Ixazomib citrate (MLN9708) is a prodrug of Ixazomib (MLN-2238) and an orally bioavailable second-generation proteasome inhibitor with an IC ₅₀ of 3.4 nM, exhibiting potential antineoplastic activity.
Targets(IC ₅₀)	Proteasome,Autophagy
In vitro	Treatment of MM cells with MLN2238 predominantly inhibits chymotrypsin-like activity of the proteasome and induces accumulation of ubiquitinated proteins. MLN2238 inhibits growth and induces apoptosis in MM cells resistant to conventional and bortezomib therapies without affecting the viability of normal cells[1].
In vivo	In animal tumor model studies, Ixazomib is well tolerated and inhibits tumor growth with significantly reduced tumor recurrence. A head-to-head analysis of Ixazomib versus bortezomib showed a significantly longer survival time in mice treated with Ixazomib than mice receiving bortezomib[1].

Solubility Information

Solubility	DMSO: 250 mg/mL (483.45 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: 4 mg/mL (7.74 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	1.9338 mL	9.6689 mL	19.3379 mL
5 mM	0.3868 mL	1.9338 mL	3.8676 mL
10 mM	0.1934 mL	0.9669 mL	1.9338 mL
50 mM	0.0387 mL	0.1934 mL	0.3868 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

Chauhan D, et al. In vitro and in vivo selective antitumor activity of a novel orally bioavailable proteasome inhibitor MLN9708 against multiple myeloma cells. Clin Cancer Res. 2011 Aug 15;17(16):5311-21.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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