



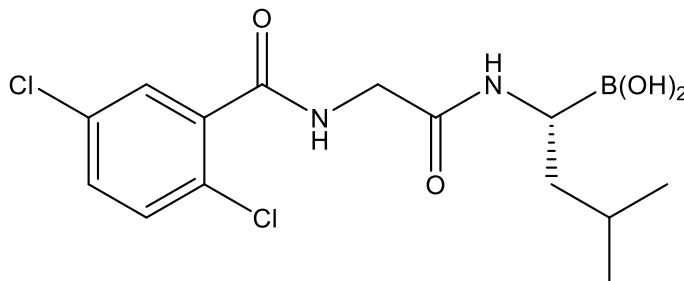
Catalog # 10-5185

Ixazomib

CAS# 1072833-77-2

(R)-(1-(2-(2,5-Dichlorobenzamido)acetamido)-3-methylbutyl)boronic acid; MLN2238

Lot # E109613



Ixazomib is a selective, potent, and reversible proteasome inhibitor, which targets the chymotrypsin-like proteolytic ($\beta 5$) site of the 20S proteasome (IC_{50} of 3.4 nM) and the caspase-like ($\beta 1$) site (IC_{50} of 31 nM).¹ Ixazomib displays more potent, dose-dependent and time-dependent cytotoxicity and inhibition of cell proliferation than bortezomib.² It is a clinically useful agent (in cotreatment with other drugs) for multiple myeloma.³ It has also been shown to be effective in Light Chain (AL) Amyloidosis and is often used in combination with cyclophosphamide and dexamethasone.⁴

- 1) Gupta *et al.* (2018), *Clinical Pharmacology of Ixazomib: The First Oral Proteasome Inhibitor*; Clin. Pharmacokinet. **58** 431
- 2) Gu *et al.* (2013), *MLN2238, a proteasome inhibitor, induces caspase-dependent cell death, cell cycle arrest, and potentiates the cytotoxic activity of chemotherapy agents in rituximab-chemotherapy-sensitive or rituximab-chemotherapy-resistant B-cell lymphoma preclinical models*; Anticancer Drugs **24** 1030
- 3) Muz *et al.* (2016), *Spotlight on ixazomib: potential in the treatment of multiple myeloma*; Drug Des. Devel. Ther. **10** 217
- 4) Muchtar *et al.* (2022), *Phase 2 trial of ixazomib, cyclophosphamide, and dexamethasone for previously untreated light chain amyloidosis*; Blood Adv. **6** 5429

PHYSICAL DATA

Molecular Weight: 361.03
Molecular Formula: $C_{14}H_{19}BCl_2N_2O_4$
Purity: >98% by HPLC
NMR: (Conforms)
Solubility: Soluble in DMSO (25 mg/mL)
Physical Description: White to Off-white solid
Storage and Stability: Store as supplied, desiccated at $-20^{\circ}C$ for up to 2 years from the date of purchase.
Solutions in DMSO may be stored at $-20^{\circ}C$ for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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