



Catalog # 10-2120

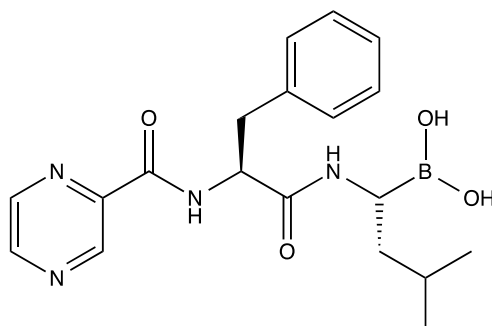
Bortezomib

CAS# 179324-69-7

N-(2-Pyrazine)carbonyl-L-phenylalanine-L-leucine boronic acid

MG-341, PS-341

Lot # X102736



Potent and selective proteasome inhibitor ($K_i=0.6$ nM). Inhibits proliferation of a number of tumor cell lines ($IC_{50}=7$ nM). Inhibits $TNF\alpha$ synthesis and FGF-induced angiogenesis. Clinically useful agent for treatment of multiple myeloma.³ Shows promise in the treatment of neurodegenerative diseases in which low-expressing proteins such as IKAP/hELP1 in familial dysautonomia are preserved.⁴ Reversible. Cell permeable.

- 1) Adams *et al.* (1999), *Proteasome inhibitors: a novel class of potent and effective antitumor agents*; Cancer Res., **59** 2615
- 2) Williams *et al.* (2003), *Differential effects of the proteasome inhibitor bortezomib on apoptosis and angiogenesis in human prostate tumor xenografts*; Mol. Cancer Ther., **2** 835
- 3) Richardson *et al.* (2003), *Bortezomib (PS-341): a novel, first-in-class proteasome inhibitor for the treatment of multiple myeloma and other cancers*; Cancer Control, **10** 361
- 4) Herve and Ibrahim (2017), *Proteasome inhibitors to alleviate aberrant IKBKAP mRNA splicing and low IKAP/hELP1 synthesis in familial dysautonomia*; Neurobiol. Dis., **103** 113

PHYSICAL DATA

Molecular Weight: 384.25

Molecular Formula: $C_{19}H_{25}BN_4O_4$

Purity: >98% by HPLC

NMR: (Conforms)

Solubility: DMSO (up to 50 mg/ml), Ethanol (up to 35 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied at $-20^{\circ}C$ for up to 1 year from the date of purchase. Solutions in DMSO and ethanol may be stored at $-20^{\circ}C$ for up to 1 month.

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