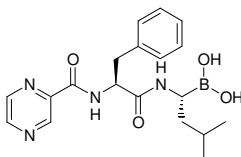




## Certificate of Analysis

**Axon Catalogue ID:** 1810 **Batch Number:** 1  
**Product Name:** Bortezomib  
**Alternative Name(s):** PS 341; Velcade  
**IUPAC Name:** (R)-3-Methyl-1-((S)-3-phenyl-2-(pyrazine-2-carboxamido)propanamido)butan-2-ylboronic acid

**Structure:**



**Amount:**

**CAS number(s):** 179324-69-7  
**Molecular Formula:** C<sub>19</sub>H<sub>25</sub>BN<sub>4</sub>O<sub>4</sub> **Molecular Weight:** 384.24  
**Batch Molecular Formula:** C<sub>19</sub>H<sub>25</sub>BN<sub>4</sub>O<sub>4</sub> **Batch Molecular Weight:** 384.24  
**Appearance:** White solid **Observed mp:** 134 - 136 °C  
**TLC (R<sub>f</sub>):** 0.4 DCM/Methanol (9:1)  
**Chemical Purity:** 98.7%  
**<sup>1</sup>H-NMR:** Analytical data confirm chemical structure  
**Mass Spec:** Analytical data confirm chemical structure  
**Microanalysis:** Calculated: C 59.39, H 6.56, N 14.58; Found: C ND, H ND, N ND  
**Storage Conditions:** Store at -20 °C

Solubility Data:	Solvent	Solubility (mg/ml)	Solubility (mM)	Remarks
	Water			Not Tested
	0.1N NaOH (aq)			Not Tested
	0.1N HCl (aq)			Not Tested
	DMSO	24.0	62.5	
	EtOH			Not Tested

**Remarks:**

**QC Date:** 26-2-2024

The purity of Axon Ligands is confirmed by HPLC, MS, NMR and/or microanalysis. Analytical data are available upon request. Request can be submitted by e-mail to [info@axonmedchem.com](mailto:info@axonmedchem.com) indicating Catalogue ID and Batch number.

**Caution: Not fully tested. For research purposes only**