

PRODUCT DATA SHEET



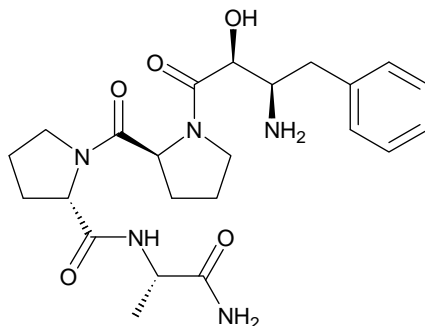
PRODUCT: Apstatin
N-[(2S,3R)-3-Amino-2-hydroxy-4-phenylbutanoyl]-
L-prolyl-L-prolyl-L-alaninamide

CAS NO. 160470-73-5

CATALOG NO.: PI-145

LOT NO.:

STRUCTURE:



PHYSICAL APPEARANCE: White solid

MOLECULAR FORMULA: C₂₃H₃₃N₅O₅

MOLECULAR WEIGHT: 459.5

PURITY: 98% (HPLC: RP Vydac 218 TP, 1.5 mL/min, 230nm, A = 0.1%TFA/H₂O
B = 0.1%TFA/CH₃CN gradient of 5-95% B over 20 min. R_f = 6.34 min.)

SOLUBILITY: Soluble in water (>25 mg/mL) and DMSO (20 mg/mL)

STORAGE: Store, as supplied, at -20°C for up to 1 year.

APPLICATION NOTES: Apstatin is a potent and selective inhibitor of aminopeptidase P (APP), K_i = 2.6 μM for purified rat lung membrane-bound APP.¹ It blocks the APP-mediated degradation of bradykinin but does not inhibit ACE or other known bradykinin-degrading enzymes. In rats perfused with apstatin (40 μM) along with an ACE inhibitor, degradation of bradykinin was almost completely blocked. Limits myocardial infarct size alone² or with ACE inhibitors³. A cytoplasmic APP expressed in *C. elegans* was also inhibited by apstatin (IC₅₀ = 1 μM).⁴

- REFERENCES:
1. M. M. Prechel *et al.* *J. Pharmacol. Exp. Ther.* 1995 **275** 1136
 2. S. Wolfrum *et al.* *Br. J. Pharmacol.* 2001 **134** 370
 3. K. K. Veeravalli *et al.* *Pharmacol. Res.* 2003 **48** 557
 4. V. Laurent *et al.* *Eur. J. Biochem.* 2001 **268** 5430

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The pharmacological and toxicological properties of this product have not been fully investigated. Exercise caution in use and handling. This product must not be used in humans.