

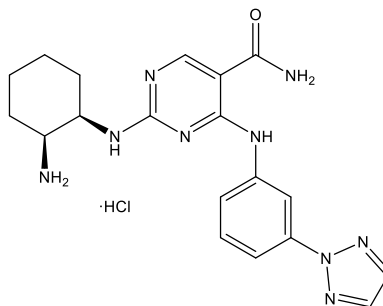
Catalog #10-4650

P505-15

CAS# 1370261-97-4

2-[[[(1R,2S)-2-Aminocyclohexyl]amino]-4-[3-(triazol-2-yl)anilino]pyrimidine-5-carboxamide hydrochloride; PRT062607;
BIIB-057

Lot # FBS4025



P505-15 is a highly selective and potent ($IC_{50} = 1-2$ nM) inhibitor of spleen tyrosine kinase (Syk).¹ It potently inhibited B cell antigen receptor-mediated B cell signaling/activation and basophil degranulation. It displayed anti-inflammatory activity in rodent models of rheumatoid arthritis. P505-15 displayed efficacy *in vitro* and *in vivo* in non-Hodgkin lymphoma and chronic lymphocytic leukemia models.^{2,3} It protected against toxin-induced hepatic fibrosis, associated hepatocellular injury, and hepatocarcinogenesis.⁴ P505-15 was also found to inhibit PINK1 ($IC_{50} = 0.5-3$ μ M) in HeLa cells and dopaminergic neurons.⁵

- 1) Coffey *et al.* (2012), *Specific inhibition of spleen tyrosine kinase suppresses leukocyte immune function and inflammation in animal models of rheumatoid arthritis*; J. Pharmacol. Exp. Ther. **340** 350
- 2) Hoellenriegel *et al.* (2012), *Selective, novel spleen tyrosine kinase (Syk) inhibitors suppress chronic lymphocytic leukemia B-cell activation and migration*; Leukemia **26** 1576
- 3) Spurgeon *et al.* (2013), *The selective SYK inhibitor P505-15 (PRT062607) inhibits B cell signaling and function in vitro and in vivo and augments the activity of fludarabine in chronic lymphocytic leukemia*; J. Pharmacol. Exp. Ther. **344** 378
- 4) Torres-Hernandez *et al.* (2019), *Targeting SYK signaling in myeloid cells protects against liver fibrosis and hepatocarcinogenesis*; Oncogene **38** 4512
- 5) Rasool *et al.* (2024), *Identification and structural characterization of small molecule inhibitors of PINK1*; Sci. Rep. **14** 7739

PHYSICAL DATA

Molecular Weight:	429.91
Molecular Formula:	C ₁₉ H ₂₃ N ₉ O·HCl
Purity:	>98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (25 mg/mL); Water (>25 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or water may be stored at -20°C for up to 3 months.

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