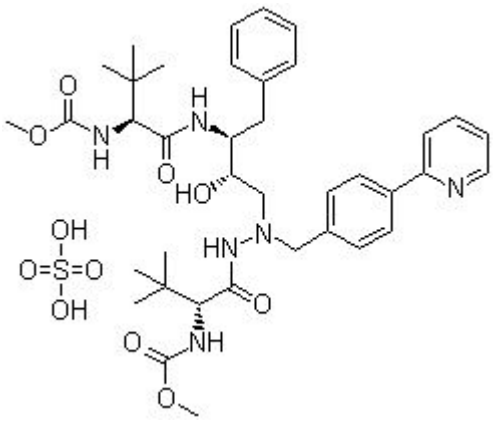
Product Introduction

Atazanavir Sulfate

Atazanavir is a **HIV protease** inhibitor with K_I of 2.66 nM.

Technical Data:

Molecular Weight (MW):	802.93	
Formula:	$C_{38}H_{52}N_6O_7.H_2SO_4$	
Solubility (25°C) * <1 mg/ml means slightly soluble or insoluble:	DMSO 104 mg/mL	
	Water <1 mg/mL	
	Ethanol <1 mg/mL	
Purity:	>98%	
Storage:	3 years -20℃Powder	
	6 months-80℃in DMSO	
CAS No.:	229975-97-7	

Biological Activity

Atazanavir inhibits the proteolytic cleavage of the viral gag precursor p55 polyprotein with IC50 of ~47 nM in virus-infected H9 cells. Atazanavir exhibits potent antiviral activity with EC50 of 3.89 nM in RF/MT-2 strains. [1]. Atazanavir is shown to be an inhibitor of bilirubin glucuronidation with IC50 of 2.4 μM. Atazanavir inhibits recombinant UGT1A1 with Ki of 1.9 μM. [2] Atazanavir inhibits cell growth in U251, T98G, and LN229 glioblastoma cell lines, with strikingly increased GRP78 and CHOP protein levels. Atazanavir causes a prominent increase of polyubiquitinated proteins of various different sizes in U251 glioblastoma cells. [3] Atazanavir also inhibits human 20S proteasome with IC50 of 26 μM. Atazanavir (30 μM) changes the magnitudes of ER stress and UPR gene expression in HepG2 cells. [4] Atazanavir (30 mM)

causes a 2.5-fold increase in immunoreactive P-gp expression with decreased intracellular Rh123 in LS180V cells. [5]

Atazanavir is generally more potent than other HIV-1 Prt inhibitors, including IDV, SQV, RTV, NFV, and APV.

References

[1] Robinson BS, et al. Antimicrob Agents Chemother, 2000, 44(8), 2093-2099.

[2] Zhang D, et al. Drug Metab Dispos, 2005, 33(11), 1729-1739.

[3] Pyrko P, et al. Cancer Res, 2007, 67(22), 10920-10928.

[4] Parker RA, et al. Mol Pharmacol, 2005, 67(6), 1909-1919.

[5] Perloff ES, et al. Drug Metab Dispos, 2005, 33(6), 764-770.

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