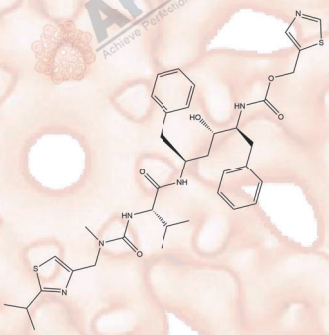
Product Data Sheet

Ritonavir



Cat. No.:	A8203
CAS No.:	155213-67-5
Formula:	C37H48N6O5S2
M.Wt:	720.9
Synonyms:	Abbott 84538, ABT-538,Ritonavir
Target:	Proteases
Pathway:	HIV Protease
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

⩾26 mg/mL in DMSO with gentle warming; insoluble in H2O; ⩾9.02 mg/mL in EtOH

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	1.3872 mL	6.9358 mL	13.8715 mL
5 mM	0.2774 mL	1.3872 mL	2.7743 mL
10 mM	0.1387 mL	0.6936 mL	1.3872 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	HIV protease inhibitor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Preparation method:	The solubility of this compound in DMSO is > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.
Reacting conditions:	0 ~ 0.16 μM
Applications:	Ritonavir potently inhibited the activity of laboratory and clinical strains of HIV-1

		with the EC50 values ranging from 0.022 to 0.13 μM. Moreover, Ritonavir also efficiently inhibited the activity of HIV-2, with the EC50 value of 0.16 μM.
In Vivo	**Animal experiment**	
	Animal models:	Male SD rats
	Dosage form:	10 mg/kg; p.o.
	Applications:	In rats, oral administration of 10 mg/kg Ritonavir resulted in prolonged absorption (tmax = 2.0 hrs). The peak of plasma Ritonavir concentration was > 100 folds of the EC50 value. The calculated oral bioavailability reached 78%.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Kempf DJ, Marsh KC, Denissen JF, McDonald E, Vasavanonda S, Flentge CA, Green BE, Fino L, Park CH, Kong XP, et al. ABT-538 is a potent inhibitor of human immunodeficiency virus protease and has high oral bioavailability in humans. Proc Natl Acad Sci U S A. 1995 Mar 28;92(7):2484-8.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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