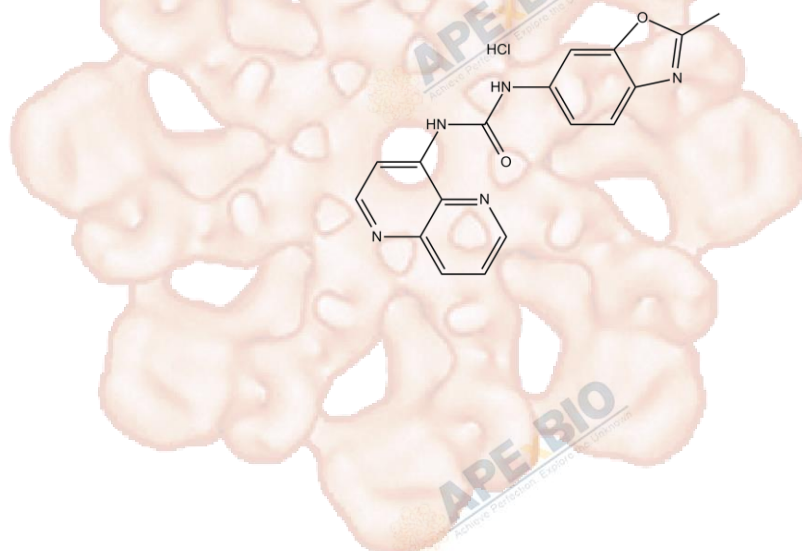


Product Data Sheet

SB-334867 hydrochloride

Cat. No.:	B1281
CAS No.:	249889-64-3
Formula:	C ₁₇ H ₁₄ N ₂ O
M.Wt:	355.78
Synonyms:	
Target:	GPCR/G protein
Pathway:	OX Receptor
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥2.72 mg/mL in EtOH with ultrasonic; ≥5.2 mg/mL in DMSO with gentle warming

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.8107 mL	14.0536 mL	28.1073 mL
	5 mM	0.5621 mL	2.8107 mL	5.6215 mL
	10 mM	0.2811 mL	1.4054 mL	2.8107 mL

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

Biological Activity

Shortsummary

Orexin-1 receptor antagonist

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	CHO-OX1 and CHO-OX2 cells
Preparation method:	The solubility of this compound in DMSO is >5.2mg/mL. 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:	100 pM-10 μM

	Applications:	In CHO-OX1 cells, SB-334867-A (100 pM-10 µM) inhibited the orexin-A (10 nM) and orexin-B (100 nM)-induced calcium responses in a concentration-dependent way, with apparent pKB values of 7.27±0.04 and 7.23±0.03, respectively. In CHO-OX2 cells, SB-334867-A also inhibited the orexin-A (10 nM) and orexin-B (10 nM)-induced calcium responses by 32.7±1.9 and 22.0±4.0%, respectively.
In Vivo	Animal experiment	
	Animal models:	adult male Lister hooded rats
	Dosage form:	3.0, 10.0 and 30.0 mg/kg, i.p.
	Applications:	In adult male Lister hooded rats, SB-334867 significantly reduced food intake and most active behaviours (eating, grooming, sniffing, locomotion and rearing), while increasing resting. SB-334867 dose-dependently blocked the effects of orexin-A, such as stimulation of food intake, increasing grooming and delaying the onset of behavioural satiety.
	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] Smart D, Sabido-David C, Brough S J, et al. SB-334867-A: the first selective orexin-1 receptor antagonist. British journal of pharmacology, 2001, 132(6): 1179-1182.
- [2] Rodgers R J, Halford J C G, Nunes de Souza R L, et al. SB-334867, a selective orexin-1 receptor antagonist, enhances behavioural satiety and blocks the hyperphagic effect of orexin-A in rats. European Journal of Neuroscience, 2001, 13(7): 1444-1452.

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 APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term 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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