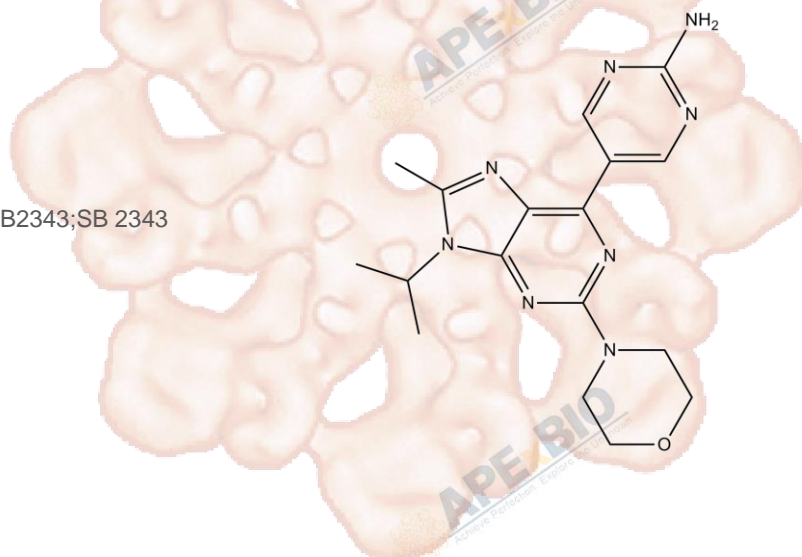


Product Data Sheet

VS-5584 (SB2343)

Cat. No.:	A3927
CAS No.:	1246560-33-7
Formula:	C ₁₇ H ₂₂ N ₈ O
M.Wt:	354.41
Synonyms:	SB-2343; VS5584; VS 5584; SB2343; SB 2343
Target:	PI3K/Akt/mTOR Signaling
Pathway:	PI3K
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥17.7 mg/mL in DMSO; ≥4.71 mg/mL in EtOH with ultrasonic

In Vitro	Preparing Stock Solutions	Mass			
		Solvent Concentration	1mg	5mg	10mg
		1 mM	2.8216 mL	14.1080 mL	28.2159 mL
		5 mM	0.5643 mL	2.8216 mL	5.6432 mL
		10 mM	0.2822 mL	1.4108 mL	2.8216 mL

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

Biological Activity

Shortsummary	MTOR/P13K inhibitor, potent and selective	
IC ₅₀ & Target	3.4 nM (mTOR), 2.6 nM (PI3K α), 3.3 nM (PI3K α -H1047), 21 nM (PI3K β), 2.7 nM (PI3K δ), 3.0 nM (PI3K γ)	
In Vitro	Cell Viability Assay	
	Cell Line:	H929 cells
	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:	Up to 10 μ M; 48 hrs
	Applications:	VS-5584 showed high anti-proliferative activity in a broad spectrum of cancer cells, with H929 cells (multiple myeloma) exhibiting the highest sensitivity in our panel (IC ₅₀ = 48 nM).
In Vivo	Animal experiment	
	Animal models:	PTENnull human prostate PC3 xenograft model
	Dosage form:	11 or 25 mg/kg; p.o.; q.d., for 28 days
	Applications:	In a PTENnull human prostate PC3 xenograft model, VS-5584 treatment led to significant tumor growth inhibition (TGI) of 79% and 113% for 11 and 25 mg/kg, respectively.
	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

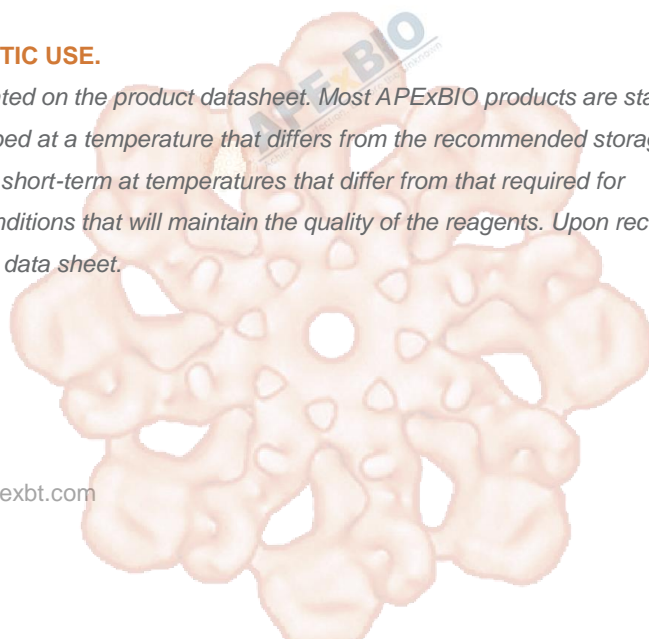
[1]. Hart S, Novotny-Diermayr V, Goh KC, Williams M, Tan YC, Ong LC, Cheong A, Ng BK, Amalini C, Madan B, Nagaraj H, Jayaraman R, Pasha KM, Ethirajulu K, Chng WJ, Mustafa N, Goh BC, Benes C, McDermott U, Garnett M, Dymock B, Wood JM. VS-5584, a novel and highly selective PI3K/mTOR kinase inhibitor for the treatment of cancer. Mol Cancer Ther. 2013 Feb;12(2):151-61.

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. 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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