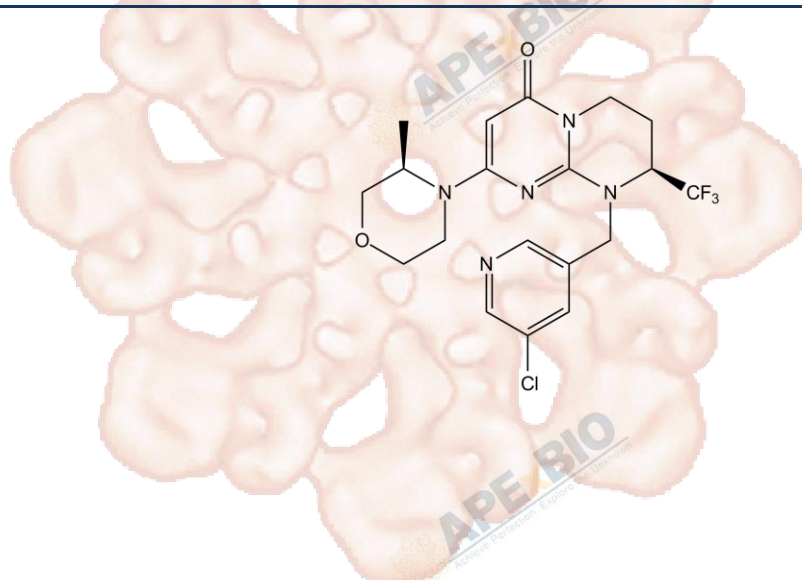


Product Data Sheet

SAR405

Cat. No.:	A8883
CAS No.:	1523406-39-4
Formula:	C ₁₉ H ₂₁ ClF ₃ N ₅ O ₂
M.Wt:	443.85
Synonyms:	
Target:	Ubiquitination/ Proteasome
Pathway:	Autophagy
Storage:	Store at -20°C



Solvent & Solubility

≥22.19 mg/mL in DMSO; insoluble in H₂O; ≥32.25 mg/mL in EtOH with ultrasonic

In Vitro

Preparing Stock Solutions	Solvent	Mass Concentration	Mass		
			1mg	5mg	10mg
		1 mM	2.2530 mL	11.2651 mL	22.5301 mL
		5 mM	0.4506 mL	2.2530 mL	4.5060 mL
		10 mM	0.2253 mL	1.1265 mL	2.2530 mL

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

Biological Activity

Shortsummary

Selective ATP-competitive inhibitor of Vps34

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	GFP-LCLC3 HeLa cells ; GFP-LCLC3 H1299 cells
Preparation method:	Soluble in DMSO > 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:	16 h-24 h

	Applications:	In RKO cells, 24-h SAR405 treatment leads to a dose-dependent accumulation of p62 protein and 16-h of SAR405 treatment shows a significant decrease of mature cathepsin D. SAR405 also completely inhibits the formation of autophagosomes in GFP-LCLC3 HeLa cells. In addition, SAR405 prevents autophagy induced by mTOR inhibitor and synergizes with everolimus in GFP-LCLC3 H1299 cells,
In Vivo	Animal experiment	
	Applications:	

Product Citations

- 1.An H, Ordureau A, et al. "TEX264 Is an Endoplasmic Reticulum-Resident ATG8-Interacting Protein Critical for ER Remodeling during Nutrient Stress." Mol Cell. 2019 Jun 6;74(5):891-908.e10.PMID:31006537
- 2.Yuan NN, Cai CZ, et al. "Canthin-6-One Accelerates Alpha-Synuclein Degradation by Enhancing UPS Activity: Drug Target Identification by CRISPR-Cas9 Whole Genome-Wide Screening Technology." Front Pharmacol. 2019 Jan 28;10:16.PMID:30745870
- 3.Zhang M, Liu F, et al. "The MTOR signaling pathway regulates macrophage differentiation from mouse myeloid progenitors by inhibiting autophagy." Autophagy. 2019 Feb 27:1-13.PMID:30724690
- 4.Cui-ZanCai, He-FengZhou, et al. "Natural alkaloid harmine promotes degradation of Alpha-synuclein via PKA-mediated ubiquitin-proteasome system activation." Phytomedicine. Available online 30 January 2019, 152842.
- 5.Jacob M New. "Autophagy in Head and Neck Cancer Associated Fibroblasts: Biology and Therapy." University of Kansas.2018.

See more customer validations on www.apexbt.com.

References

1. Ronan B, Flamand O1, Vescovi L et al. A highly potent and selective Vps34 inhibitor alters vesicle trafficking and autophagy. Nat Chem Biol. 2014 Dec;10(12):1013-9.

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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