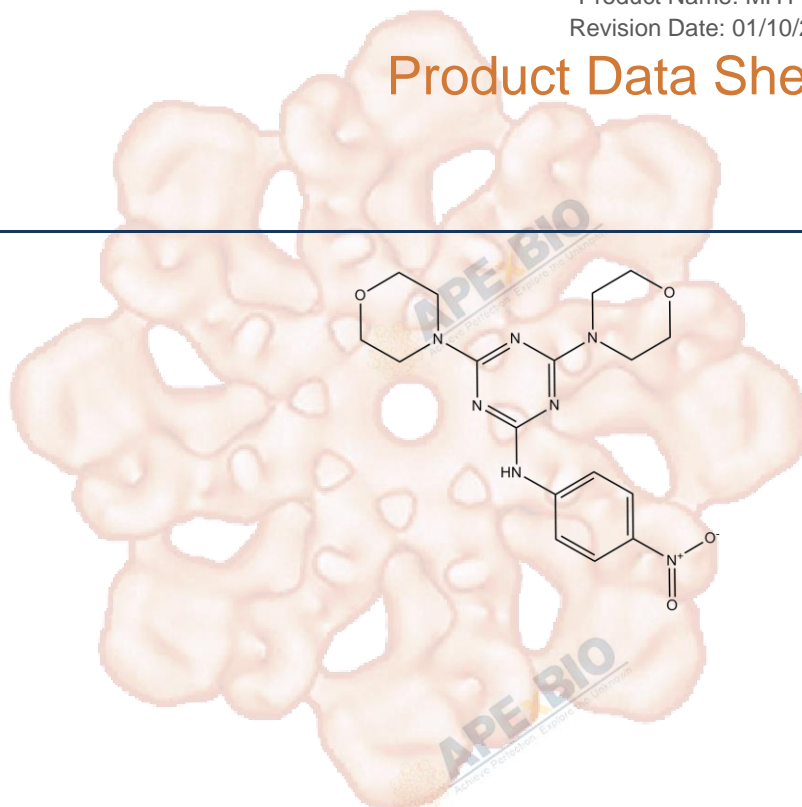


Product Data Sheet

MHY1485

Cat. No.:	B5853
CAS No.:	326914-06-1
Formula:	C17H21N7O4
M.Wt:	387.39
Synonyms:	
Target:	PI3K/Akt/mTOR Signaling
Pathway:	mTOR
Storage:	Store at -20°C



Solvent & Solubility

insoluble in EtOH; insoluble in H₂O; ≥19.35 mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		2.5814 mL	12.9069 mL	25.8138 mL
	5 mM		0.5163 mL	2.5814 mL	5.1628 mL
	10 mM		0.2581 mL	1.2907 mL	2.5814 mL

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

Biological Activity

Shortsummary

mTOR activator, autophagy inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Ac2F cells
Preparation method:	The solubility of this compound in DMSO is > 19.4 mg/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:	2 μM; 6 hrs

	Applications:	Under starvation, LC3 and lysosomal signal overlap in Ac2F cells transfected with AdGFP-LC3 and stained with LysoTracker (for visualization of lysosomes) was decreased by MHY1485. Thus, MHY1485 inhibited starvation-induced fusion between autophagosomes and lysosomes.
In Vivo	Animal experiment	
	Applications:	

Product Citations

1. Gao L, Lv G, et al. "Glycochenodeoxycholate promotes hepatocellular carcinoma invasion and migration by AMPK/mTOR dependent autophagy activation." Cancer Lett. 2019 Jul 10;454:215-223.PMID:30980867
2. Wang J, Yang C, et al. "T-2 Toxin Exposure Induces Apoptosis in TM3 Cells by Inhibiting Mammalian Target of Rapamycin/Serine/Threonine Protein Kinase(mTORC2/AKT) to Promote Ca(2+)Production." Int J Mol Sci. 2018 Oct 27;19(11). pii: E3360.PMID:30373220

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References

- [1]. Choi YJ, Park YJ, Park JY, Jeong HO, Kim DH, Ha YM, Kim JM, Song YM, Heo HS, Yu BP, Chun P, Moon HR, Chung HY. Inhibitory effect of mTOR activator MHY1485 on autophagy: suppression of lysosomal fusion. PLoS One. 2012;7(8):e43418.

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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