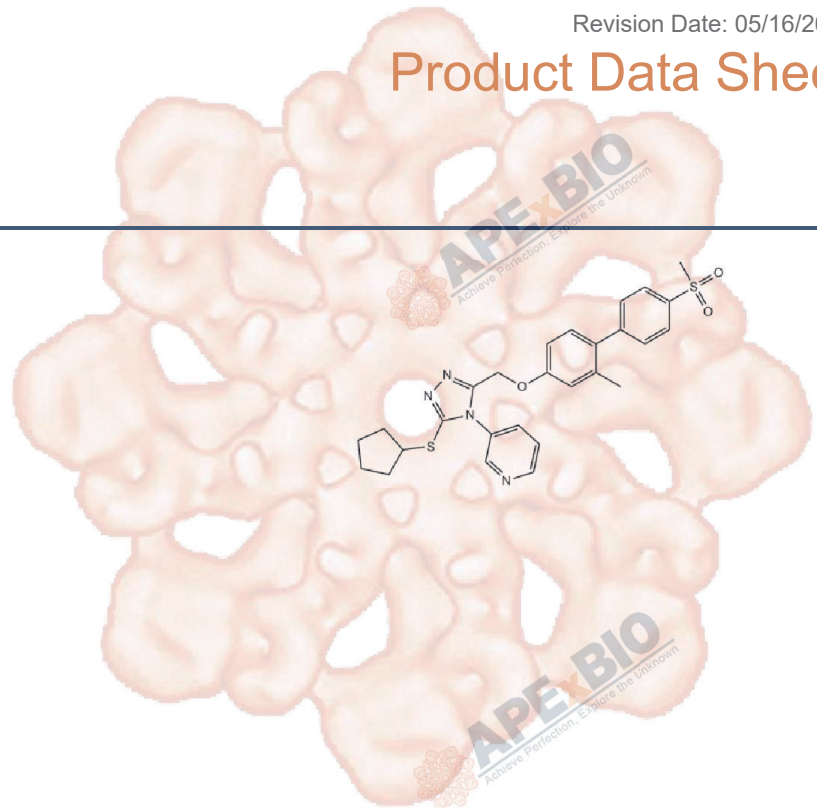


Product Data Sheet

NMS-873

Cat. No.:	B2168
CAS No.:	1418013-75-8
Formula:	C ₂₇ H ₂₈ N ₄ O ₃ S ₂
M.Wt:	520.67
Synonyms:	
Target:	Ubiquitination/ Proteasome
Pathway:	p97
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥17.1 mg/mL in DMSO; ≥2.54 mg/mL in EtOH with gentle warming and ultrasonic

In Vitro	Preparing Stock Solutions	Mass			
		Solvent	1mg	5mg	10mg
		Concentration			
		1 mM	1.9206 mL	9.6030 mL	19.2060 mL
		5 mM	0.3841 mL	1.9206 mL	3.8412 mL
		10 mM	0.1921 mL	0.9603 mL	1.9206 mL

Please refer to the solubility information to select the appropriate solvent

Biological Activity

Shortsummary	VCP/p97 inhibitor,selective and allosteric	
IC ₅₀ & Target	30 nM (p97)	
In Vitro	Cell Viability Assay	
	Cell Line:	HCT116, HeLa 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:	0.5, 2.5 μM for 6h

	Applications:	NMS-873 activated the unfolded protein response, interfered with autophagy and induced cancer cell death. NMS-873 mediated stabilization of Mcl-1 in live cells. NMS-873 inhibited the proliferative activity in HCT116 and HeLa cells with IC50 values of 0.4 and 0.7 μ M, respectively.
In Vivo	Animal experiment	
	Applications:	

Product Citations

1. McLelland GL, Goiran T, et al. "Mfn2 ubiquitination by PINK1/parkin gates the p97-dependent release of ER from mitochondria to drive mitophagy." *Elife*. 2018 Apr 20;7. pii: e32866.PMID:29676259
2. Yeo SK, French R, et al. "Opposing roles of Nfkb2 gene products p100 and p52 in the regulation of breast cancer stem cells." *Breast Cancer Res Treat*. 2017 Apr;162(3):465-477.PMID:28190248
3. Fullbright G, Rycenga HB, et al. "p97 Promotes a Conserved Mechanism of Helicase Unloading during DNA Cross-Link Repair." *Mol Cell Biol*. 2016 Nov 14;36(23):2983-2994.PMID:27644328

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References

1Magnaghi, P., D'Alessio, R., Valsasina, B., Avanzi, N., Rizzi, S., Asa, D., Gasparri, F., Cozzi, L., Cucchi, U., Orrenius, C., Polucci, P., Ballinari, D., Perrera, C., Leone, A., Cervi, G., Casale, E., Xiao, Y., Wong, C., Anderson, D. J., Galvani, A., Donati, D., O'Brien, T., Jackson, P. K. and Isacchi, A. (2013) Covalent and allosteric inhibitors of the ATPase VCP/p97 induce cancer cell death. *Nat Chem Biol*. 9, 548-556

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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