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产品名称：NMS-859
产品别名：NMS-859

生物活性：

Description	NMS-859 is a potent, covalent VCP (p97) inhibitor, with IC_{50}s of 0.37 and 0.36 μM for wild-type VCP in the presence of 60 μM and 1 mM ATP in cells, respectively.
IC_{50} & Target	IC50: 360 nM (Cellular p97, 1 mM ATP), 370 nM (Cellular p97, 60 μM ATP)[1]
In Vitro	NMS-859 is a potent VCP inhibitor, with IC_{50}s of 0.37 and 0.36 μM for wild-type VCP in the presence of 60 μM and 1 mM ATP in cells, respectively. NMS-859 shows very weak inhibitory activity against VCP^{C522T}. NMS-859 also suppresses the proliferation of cells, with IC_{50}s of 3.5 μM and 3.0 μM in HCT116 and HeLa cell lines, respectively[1].
Solvent&Solubility	***In Vitro:*** **DMSO : ≥ 42 mg/mL (120.07 mM)** * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.8589 mL	14.2943 mL	28.5886 mL
	5 mM	0.5718 mL	2.8589 mL	5.7177 mL
	10 mM	0.2859 mL	1.4294 mL	2.8589 mL

*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。

储备液的保存方式和期限：-80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 储存时，请在 1 个月内使用。

References	[1]. Magnaghi P, et al. Covalent and allosteric inhibitors of the ATPase VCP/p97 induce cancer cell death. Nat Chem Biol. 2013 Sep;9(9):548-56.

实验参考：

Cell Assay	Cells are seeded at 1,600 cells per well in 384-well white clear-bottom plates. Twenty-four hours after seeding, cells are treated with NMS-859 (eight dilution points, in duplicate) and incubated for an additional 72 h at 37°C under a 5% CO_2 atmosphere. Cells are then lysed, and the ATP content in each well is determined using a thermostable firefly luciferase-based assay as a measure of cell viability. IC_{50} values are calculated using the percentage of growth of treated cells versus the untreated control[1].
References	[1]. Magnaghi P, et al. Covalent and allosteric inhibitors of the ATPase VCP/p97 induce cancer cell death. Nat Chem Biol. 2013 Sep;9(9):548-56.