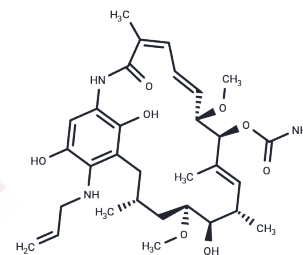


Retaspimycin

Chemical Properties

CAS No. :	857402-23-4
Formula:	C ₃₁ H ₄₅ N ₃ O ₈
Molecular Weight:	587.7
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Retaspimycin is a potent and water-soluble Hsp90 inhibitor (EC ₅₀ s of 119 nM for both Hsp90 and Grp9).
Targets (IC ₅₀)	Others, HSP
In vitro	Retaspimycin is a potent Hsp90 inhibitor (EC ₅₀ s of 119 nM for both Hsp90 and Grp9). Retaspimycin is cytotoxic to human multiple myeloma (MM) cell lines (EC ₅₀ s of 307 ± 51 nM and 306 ± 38 nM, respectively, for MM1.s and RPMI-8226 cells)[1]. Retaspimycin (IPI-504, 10-100 nM) suppresses the growth of both trastuzumab-sensitive and -resistant cells in a dose-dependent manner. Retaspimycin (0-500 nM) decreases HER2 protein expression and suppresses both Akt and MAPKs pathways in both sensitive and trastuzumab-resistant cells[3].
In vivo	selective tumor retention in RPMI-8226 tumor-bearing mice caused by Retaspimycin. The tumor volume by 69% and 84% of baseline values in GIST-882 and GIST-PSW xenografts reduced by Retaspimycin, respectively. Furthermore, Retaspimycin in combination with imatinib inhibits tumor growth more significantly than Retaspimycin alone in GIST-PSW model, but no obvious difference is observed in the GIST-882 model. Retaspimycin also downregulates KIT in gastrointestinal stromal tumor (GIST)[2]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7015 mL	8.5077 mL	17.0155 mL
5 mM	0.3403 mL	1.7015 mL	3.4031 mL
10 mM	0.1702 mL	0.8508 mL	1.7015 mL
50 mM	0.034 mL	0.1702 mL	0.3403 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Sydor JR, et al. Development of 17-allylamino-17-demethoxygeldanamycin hydroquinone hydrochloride (IPI-504), an anti-cancer agent directed against Hsp90. Proc Natl Acad Sci U S A. 2006 Nov 14;103(46):17408-13. Epub 2006 Nov 7.

Floris G, et al. The heat shock protein 90 inhibitor IPI-504 induces KIT degradation, tumor shrinkage, and cell proliferation arrest in xenograft models of gastrointestinal stromal tumors. Mol Cancer Ther. 2011 Oct;10(10):1897-908.

Scaltriti M, et al. Antitumor activity of the Hsp90 inhibitor IPI-504 in HER2-positive trastuzumab-resistant breast cancer. Mol Cancer Ther. 2011 May;10(5):817-24.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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