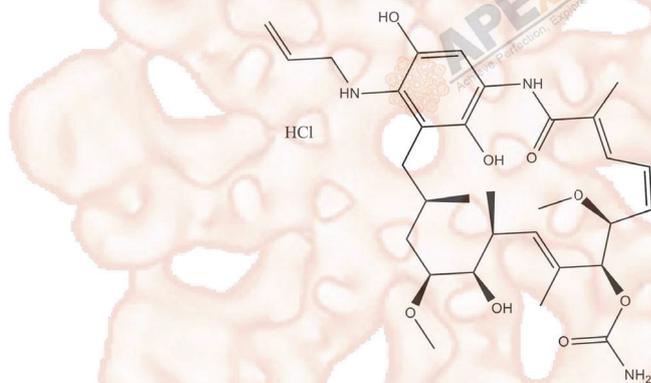


Product Data Sheet

IPI-504 (Retaspimycin hydrochloride)

Cat. No.:	A4061
CAS No.:	857402-63-2
Formula:	C31H46ClN3O8
M.Wt:	624.2
Synonyms:	IPI 504, IPI504
Target:	Proteases
Pathway:	HSP
Storage:	Store at -20°C



Solvent & Solubility

≥ 26.1 mg/mL in DMSO with gentle warming, ≥ 100 mg/mL in EtOH with ultrasonic, insoluble in H₂O

In Vitro

Preparing Stock Solutions	Mass		1mg	5mg	10mg
	Solvent	Concentration			
	1 mM		1.6021 mL	8.0103 mL	16.0205 mL
	5 mM		0.3204 mL	1.6021 mL	3.2041 mL
	10 mM		0.1602 mL	0.8010 mL	1.6021 mL

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

Biological Activity

Shortsummary

Hsp90 inhibitor, novel, potent, selective

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Glioma cell lines (D-54 MG and U-251 MG cells)
Preparation method:	This compound was soluble in DMSO. 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:	1 or 2.5 μM; 24 or 48 hrs
Applications:	In glioma cells, IPI-504 inhibited cell proliferation through increasing sub-G1

	population of cells and dose-dependently inducing fragmented DNA of the apoptotic cells.	
In Vivo	Animal experiment	
	Animal models:	Mice bearing human brain tumor D-54MG xenografts
	Dosage form:	100 mg/kg; i.p.; b.i.d., twice weekly or 5/2/5 schedule (5 days on, 2 days off, and then 5 days on), for 6 weeks
	Applications:	In immunocompromised mice, IPI-504 mildly attenuated tumor growth.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Katayama K, Noguchi K, et al. "Heat shock protein 90 inhibitors overcome the resistance to Fms-like tyrosine kinase 3 inhibitors in acute myeloid leukemia." *Oncotarget*. 2018 Sep 28;9(76):34240-34258.PMID:30344940
2. Dhawan A, Nichol D, et al."Collateral sensitivity networks reveal evolutionary instability and novel treatment strategies in ALK mutated non-small cell lung cancer." *Sci Rep*. 2017 Apr 27;7(1):1232.PMID:28450729
3. Debruyne DN, Bhatnagar N, et al. "ALK inhibitor resistance in ALK(F1174L)-driven neuroblastoma is associated with AXL activation and induction of EMT." *Oncogene*. 2016 Jul 14;35(28):3681-91.PMID:26616860

See more customer validations on www.apexbt.com.

References

- [1]. Di K, Keir ST, Alexandru-Abrams D, Gong X, Nguyen H, Friedman HS, Bota DA. Profiling Hsp90 differential expression and the molecular effects of the Hsp90 inhibitor IPI-504 in high-grade glioma models. *J Neurooncol*. 2014 Dec;120(3):473-81.

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. Short-term 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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