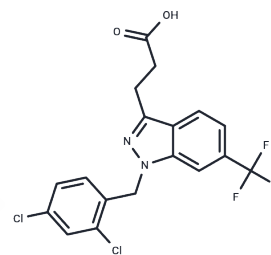


H2-Gamendazole

Chemical Properties

CAS No. :	877768-84-8
Formula:	C ₁₈ H ₁₃ Cl ₂ F ₃ N ₂ O ₂
Molecular Weight:	417.21
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	H2-Gamendazole is a novel compound for spermatogenesis inhibition and cancer therapy as an inhibitor of heat shock proteins and/or elongation factor 1 alpha, and is an Hsp90 regulator.
Targets(IC50)	Others,HSP,CFTR
In vitro	H2-Gamendazole (H2-GMZ ; 0-100 μM) was effective in rapidly blocking forskolin-induced, Cl-mediated short-circuit currents in human ADPKD cells, and it significantly inhibited both cAMP- and epidermal growth factor-induced proliferation of ADPKD cells. [1] H2-GMZ (50 μM)-treated ADPKD cells showed decreased phosphorylated ERK and decreased hyperphosphorylated retinoblastoma levels through western blot analysis.[1] H2-GMZ (50 μM ; 24, 48, 72 h) treatment also decreased ErbB2, Akt, and cyclin-dependent kinase 4 and it decreased levels of the cystic fibrosis transmembrane conductance regulator Cl channel protein.[1]
In vivo	H2-Gamendazole (20 mg/kg ; intraperitoneal injections) was effective in slowing postnatal cyst formation and kidney enlargement in the ---Pkd1flox/flox: Pkhd1-Cre mouse model.[1]

Solubility Information

Solubility	DMSO: 30 mg/mL (71.91 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3969 mL	11.9844 mL	23.9687 mL
5 mM	0.4794 mL	2.3969 mL	4.7937 mL
10 mM	0.2397 mL	1.1984 mL	2.3969 mL
50 mM	0.0479 mL	0.2397 mL	0.4794 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

Sundar SV, et al. The lonidamine derivative H2-gamendazole reduces cyst formation in polycystic kidney disease. *Am J Physiol Renal Physiol.* 2022 ; 323(4):F492-F506.

Hau RK, et al. Physiological Characterization of the Transporter-Mediated Uptake of the Reversible Male Contraceptive H2-Gamendazole Across the Blood-Testis Barrier. *J Pharmacol Exp Ther.* 2022 ; 382(3):299-312.

Matts RL, et al. A systematic protocol for the characterization of Hsp90 modulators. *Bioorg Med Chem.* 2011 ; 19(1): 684-692.

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