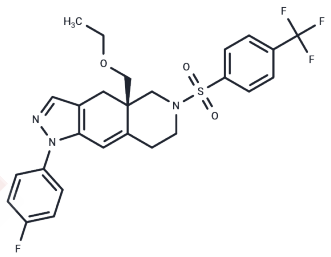
Data Sheet (Cat.No.T15000)

TargetMol

Cort108297

Chemical Properties



CAS No. : 1018679-79-2

Formula: C26H25F4N3O3S

Molecular Weight: 535.55

Storage: Store at low temperature
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	Cort108297 is a selective glucocorticoid receptor modulator and a selective GR antagonist with no affinity for other steroid receptors. Cort108297 showed a high affinity for GRs (Ki: 0.45nM).
Targets(IC50)	Glucocorticoid Receptor
In vitro	Cort108297 and CORT118335 had antagonistic effects on dexamethasone-induced KLK3 expression, which were 48% ($p<0.05$) and 60% ($p<0.05$), respectively. CORT118335(1μM) inhibited dexamethasone-induced SGK1 expression by 50%. However, Cort108297 was able to completely inhibit dexamethasone-mediated SGK1 elevation ($p<0.05$). After 3 days of dexamethasone ±SGRMs treatment in CWR-22RV1 cells, the induction effect of SGK1 gene expression was 100 times greater than that in re treated cells, while Cort108297 and CORT118335 completely inhibited this effect ($p<0.01$). Cort108297 and CORT118335 inhibited 70% and 75% of induction effects, respectively ($p<0.01$)[1].
In vivo	At the end of the treatment period, mice treated with Cort108297(40mg/kg BID) or Cort108297 (80mg/kg QD) also have significantly lower steady plasma glucose than mice receiving vehicle[3]. Male rats are treated for five days with Mifepristone (10 mg/kg), Cort108297 (30 mg/kg and 60 mg/kg), Imipramine (10mg/kg) or vehicle and exposed to forced swim test (FST) or restraint stress. Experimental data showed that both doses of Cort108297 can effectively inhibit corticosterone response to FST and restraint stress, while only high dose of Cort108297 (60mg/kg) can significantly reduce immobility in forced swimming test (FST). [1].

Solubility Information

Solubility	DMSO: 55 mg/mL (102.7 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 5.5 mg/mL (10.27 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5.5 mg/mL (10.27 mM),Suspension. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may*

In vivo Formulation	*vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8672 mL	9.3362 mL	18.6724 mL
5 mM	0.3734 mL	1.8672 mL	3.7345 mL
10 mM	0.1867 mL	0.9336 mL	1.8672 mL
50 mM	0.0373 mL	0.1867 mL	0.3734 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

Sindelar DK, et al. LLY-2707, a novel nonsteroidal glucocorticoid antagonist that reduces atypical antipsychotic-associated weight gain in rats. J Pharmacol Exp Ther. 2014 Jan;348(1):192-201.
Liu L, Huang Z, Zhang J, et al.Hypothalamus-sympathetic-liver axis mediates the early phase of stress-induced hyperglycemia in the male mice.Nature Communications.2024, 15(1): 8632.
Kach J, et al. Selective Glucocorticoid Receptor Modulators (SGRMs) Delay Castrate-Resistant Prostate Cancer Growth. Mol Cancer Ther. 2017 Aug;16(8):1680-1692.
Asagami T, et al. Selective Glucocorticoid Receptor (GR-II) Antagonist Reduces Body Weight Gain in Mice. J Nutr Metab. 2011;2011:235389.
Solomon MB, et al. The selective glucocorticoid receptor antagonist CORT 108297 decreases neuroendocrine stress responses and immobility in the forced swim test. Horm Behav. 2014 Apr;65(4):363-71.