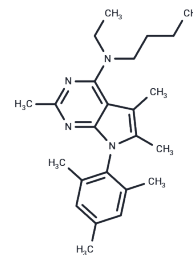


## Antalarmin

## Chemical Properties

CAS No. :	157284-96-3
Formula:	C <sub>24</sub> H <sub>34</sub> N <sub>4</sub>
Molecular Weight:	378.55
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	Antalarmin is a selective and potent corticotropin-releasing factor receptor 1 (CRHR1) antagonist that crosses the blood-brain barrier and blocks CRF activation and carrageenan-induced subcutaneous inflammation in rats.
Targets(IC50)	CRFR
In vitro	Antalarmin (100 nM; 48 hours) treatment was able to block CRF-induced increases in PKAII $\beta$ levels in hippocampal neurons derived from Tg2576 mice[2].
In vivo	In the chronic mild stress model using BALB/cByJlco male mice, intraperitoneal administration of Antalarmin (10 mg/kg; once daily for 4 weeks) was able to significantly improve the physical state of the mice[1].

## Solubility Information

Solubility	DMSO: 20 mg/mL (52.83 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 2 mg/mL (5.28 mM),Sonication is recommended. <i>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 vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	2.6417 mL	13.2083 mL	26.4166 mL
5 mM	0.5283 mL	2.6417 mL	5.2833 mL
10 mM	0.2642 mL	1.3208 mL	2.6417 mL
50 mM	0.0528 mL	0.2642 mL	0.5283 mL

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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

Ducottet C, et al. Effects of the selective nonpeptide corticotropin-releasing factor receptor 1 antagonist antalarmin in the chronic mild stress model of depression in mice. *Prog Neuropsychopharmacol Biol Psychiatry*. 2003 Jun;27(4):625-31.

Dong H, et al. Effects of corticotrophin-releasing factor receptor 1 antagonists on amyloid- $\beta$  and behavior in Tg2576 mice. *Psychopharmacology (Berl)*. 2014 Dec;231(24):4711-22.

Zorrilla EP, et al. Urocortin shares the memory modulating effects of corticotropin-releasing factor (CRF): mediation by CRF1 receptors. *Brain Res*. 2002 Oct 18;952(2):200-10.

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