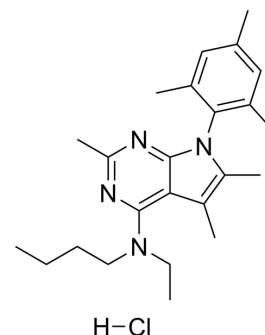


## Antalarmin hydrochloride

Cat. No.:	HY-103377
CAS No.:	220953-69-5
Molecular Formula:	C <sub>24</sub> H <sub>35</sub> ClN <sub>4</sub>
Molecular Weight:	415.01
Target:	CRFR
Pathway:	GPCR/G Protein
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

In Vitro	DMF : 20 mg/mL (48.19 mM; Need ultrasonic and warming)																	
	Ethanol : 14 mg/mL (33.73 mM; Need ultrasonic and warming)																	
	DMSO : 12.5 mg/mL (30.12 mM; Need ultrasonic and warming)																	
Preparing Stock Solutions	<table border="1"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th rowspan="2">Mass</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>2.4096 mL</td> <td>12.0479 mL</td> <td>24.0958 mL</td> </tr> <tr> <td>5 mM</td> <td>0.4819 mL</td> <td>2.4096 mL</td> <td>4.8192 mL</td> </tr> <tr> <td>10 mM</td> <td>0.2410 mL</td> <td>1.2048 mL</td> <td>2.4096 mL</td> </tr> </tbody> </table>	Solvent Concentration	Mass	1 mg	5 mg	10 mg	1 mM	2.4096 mL	12.0479 mL	24.0958 mL	5 mM	0.4819 mL	2.4096 mL	4.8192 mL	10 mM	0.2410 mL	1.2048 mL	2.4096 mL
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Please refer to the solubility information to select the appropriate solvent.																		
In Vivo	1. Add each solvent one by one: 15% Cremophor EL >> 85% Saline Solubility: 5 mg/mL (12.05 mM); Clear solution; Need ultrasonic																	

### BIOLOGICAL ACTIVITY

Description	Antalarmin (hydrochloride) is a non-peptide corticotropin-releasing hormone receptor 1 (CRHR1) antagonist with a K <sub>i</sub> of 1 nM. Antalarmin hydrochloride suppresses CRH-induced ACTH secretion and blocks CRH and novelty induced anxiety-like behavior in animal models. Antalarmin hydrochloride produces anti-inflammatory effects in arthritis models, and suppresses stress-induced gastric ulceration related to irritable bowel syndrome <sup>[1][2][3]</sup> .
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### CUSTOMER VALIDATION

- Immunity. 2024 Feb 13;57(2):364-378.e9.

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## REFERENCES

- [1]. Webster EL, et al. In vivo and in vitro characterization of antalarmin, a nonpeptide corticotropin-releasing hormone (CRH) receptor antagonist: suppression of pituitary ACTH release and peripheral inflammation. *Endocrinology*. 1996 Dec;137(12):5747-50. doi: 10.1210/endo.137.12.8940412.
- [2]. Zorrilla EP, et al. Effects of antalarmin, a CRF type 1 receptor antagonist, on anxiety-like behavior and motor activation in the rat. *Brain Res*. 2002 Oct 18;952(2):188-99.
- [3]. Deak T, et al. The impact of the nonpeptide corticotropin-releasing hormone antagonist antalarmin on behavioral and endocrine responses to stress. *Endocrinology*. 1999 Jan;140(1):79-86.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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