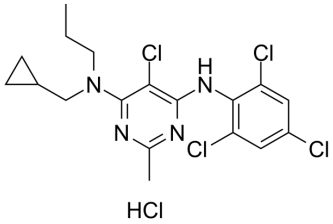
NBI-27914 hydrochloride

Cat. No.:	HY-103376
CAS No.:	1215766-76-9
Molecular Formula:	$C_{18}H_{21}Cl_5N_4$
Molecular Weight:	470.65
Target:	CRFR
Pathway:	GPCR/G Protein

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



BIOLOGICAL ACTIVITY

Description

NBI-27914 (hydrochloride) is a selective Corticotropin-Releasing Factor 1 (CRF1) receptor antagonist with a K_i value of 1.7 nM [1][3][4].

IC_{50} & Target

Ki: 1.7 nM (CRF1 receptor)[4]

In Vivo

NBI 27914 (3~30 mg/kg; i.p.) hydrochloride attenuates the referred abdominal pain at the highest dose tested, it is efficacious both 4 and 24 h post-indomethacin dosing[1].

NBI 27914 (1~10 mg/kg; i.p.) hydrochloride dose dependently attenuates Freund's Complete Adjuvant-induced mechanical hyperalgesia. NBI 27914 (10 mg/kg) hydrochloride reverses the thermal hyperalgesia. NBI 27914 hydrochloride attenuates spinal nerve ligation-induced mechanical hyperalgesia and tactile allodynia with minimal effective doses equal to 5 and 10 mg/kg, respectively[1]. The higher doses of NBI 27914 hydrochloride blocks the behavioral seizures and prevents epileptic discharges in concurrent electroencephalograms recorded from the amygdala[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male CD-1 mice (20~25 g)[1]
Dosage:	3~30 mg/kg
Administration:	I.p.
Result:	Attenuated the referred abdominal pain at the highest dose tested, it was efficacious both 4 and 24 h post-indomethacin dosing.

REFERENCES

[1]. Peng YL, et al. Central Neuropeptide S inhibits food intake in mice through activation of Neuropeptide S receptor. Peptides. 2010;31(12):2259-2263.

[2]. Hummel M, et al. Pain is a salient "stressor" that is mediated by corticotropin-releasing factor-1 receptors. Neuropharmacology. 2010;59(3):160-166.

[3]. Baram TZ, et al. The CRF1 receptor mediates the excitatory actions of corticotropin releasing factor (CRF) in the developing rat brain: in vivo evidence using a novel, selective, non-peptide CRF receptor antagonist. Brain Res. 1997;770(1-2):89-95.

[4]. Chen C, et al. Design and synthesis of a series of non-peptide high-affinity human corticotropin-releasing factor1 receptor antagonists. J Med Chem.

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