# **Product data sheet**



MedKoo Cat#: 525736		
Name: NBI-27914 HCl		CI
CAS: 1215766-76-9 (HCl)		
Chemical Formula: C <sub>18</sub> H <sub>21</sub> Cl <sub>5</sub> N <sub>4</sub>		
Exact Mass: 432.0442		CICI
Molecular Weight: 470.644		HN N H-CI
Product supplied as:	Powder	····\
Purity (by HPLC):	≥ 98%	CI N .
Shipping conditions	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.	
	In solvent: -80°C 3 months; -20°C 2 weeks.	

### 1. Product description:

NBI-27914 is a Corticotropin-Releasing Factor Antagonist of the CRF1 and CRF2 receptors (Corticotropin-releasing factor).

### 2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	43.42	92.26
Ethanol	43.42	92.26

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.12 mL	10.62 mL	21.25 mL
5 mM	0.42 mL	2.12 mL	4.25 mL
10 mM	0.21 mL	1.06 mL	2.12 mL
50 mM	0.04 mL	0.21 mL	0.42 mL

## 5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

### 6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

TBD

#### In vivo study

- 1. Hara R, Asaoka Y, Takahashi D, Nomura H, Amano T, Minami M. Disappearance of the inhibitory effect of neuropeptide Y within the dorsolateral bed nucleus of the stria terminalis in rats with chronic pain. Neurosci Lett. 2020 May 29;728:134958. doi: 10.1016/j.neulet.2020.134958. Epub 2020 Apr 9. PMID: 32278943.
- 2. Ji G, Neugebauer V. Contribution of Corticotropin-Releasing Factor Receptor 1 (CRF1) to Serotonin Receptor 5-HT2CR Function in Amygdala Neurons in a Neuropathic Pain Model. Int J Mol Sci. 2019 Sep 6;20(18):4380. doi: 10.3390/ijms20184380. PMID: 31489921; PMCID: PMC6770811.

#### 7. Bioactivity

Biological target:

NBI-27914 (hydrochloride) is a selective Corticotropin-Releasing Factor 1 (CRF1) receptor antagonist with a K<sub>i</sub> value of 1.7 nM.

In vitro activity

TBD

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#### In vivo activity

Specifically, bilateral intra-dlBNST injections of the CRF type 1 receptor antagonist NBI27914 increased intra-nucleus accumbens dopamine release and induced reward-related behaviors in rats with chronic pain.

Reference: Neurosci Lett. 2020 May 29;728:134958. https://pubmed.ncbi.nlm.nih.gov/32278943/

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.