Product data sheet



MedKoo Cat#: 584725		
Name: R 121919 HCl		N-
CAS: 195055-66-4		
Chemical Formula: C ₂₂ H ₃₃ ClN ₆		$\int_{\mathcal{N}} N$
Molecular Weight: 417.00		
Product supplied as:	Powder	N H-CI
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	N-N'
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.	, N
	In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

R 121919 hydrochloride is a high affinity CRF1 antagonist and is orally bioavailable.

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
Ethanol	41.7	100
DMSO	4.17	10

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg		
1 mM	2.4 mL	11.99 mL	23.98 mL		
5 mM	0.48 mL	2.4 mL	4.8 mL		
10 mM	0.24 mL	1.2 mL	2.4 mL		
50 mM	0.05 mL	0.24 mL	0.48 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

1. Watanabe Y, Suzuki Y, Emi A, Murakawa T, Hishiki T, Kato F, Sakaguchi S, Wu H, Yano T, Lim CK, Takasaki T, Nakano T. Identification of the corticotropin-releasing factor receptor 1 antagonists as inhibitors of Chikungunya virus replication using a Gaussia luciferase-expressing subgenomic replicon. Biochem Biophys Res Commun. 2022 Dec 31;637:181-188. doi: 10.1016/j.bbrc.2022.11.013. Epub 2022 Nov 9. PMID: 36403481.

In vivo study

- Jutkiewicz EM, Wood SK, Houshyar H, Hsin LW, Rice KC, Woods JH. The effects of CRF antagonists, antalarmin, CP154,526, LWH234, and R121919, in the forced swim test and on swim-induced increases in adrenocorticotropin in rats. Psychopharmacology (Berl). 2005 Jul;180(2):215-23. doi: 10.1007/s00213-005-2164-z. Epub 2005 Feb 5. PMID: 15696320; PMCID: PMC1315297.
- 2. Hu P, Liu J, Maita I, Kwok C, Gu E, Gergues MM, Kelada F, Phan M, Zhou JN, Swaab DF, Pang ZP, Lucassen PJ, Roepke TA, Samuels BA. Chronic Stress Induces Maladaptive Behaviors by Activating Corticotropin-Releasing Hormone Signaling in the Mouse Oval Bed Nucleus of the Stria Terminalis. J Neurosci. 2020 Mar 18;40(12):2519-2537. doi: 10.1523/JNEUROSCI.2410-19.2020. Epub 2020 Feb 13. PMID: 32054675; PMCID: PMC7083537.

7. Bioactivity

Biological target:

R 121919 hydrochloride reduces stress-induced elevations of plasma ACTH. It is an anxiolytic and antidepressant in vivo.

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In vitro activity

R121919 exhibited inhibitory effects on Chikungunya virus infection.

Reference: Biochem Biophys Res Commun. 2022 Dec 31;637:181-188. https://pubmed.ncbi.nlm.nih.gov/36403481/

In vivo activity

This study compared the potential antidepressant-like effects of four CRF antagonists, one being R121919, 60 min prior to the forced swim test and the corresponding effect on swim-induced HPA activation. They found that R121919 did not produce antidepressant-like effects in the forced swim test.

Reference: Psychopharmacology (Berl). 2005 Jul;180(2):215-23. https://pubmed.ncbi.nlm.nih.gov/15450359/

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.