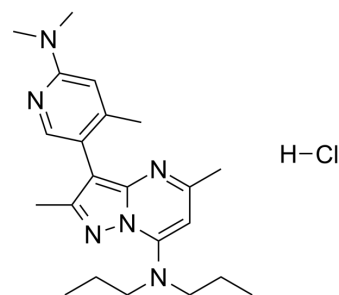


## R121919 hydrochloride

Cat. No.:	HY-115645
CAS No.:	195055-66-4
Molecular Formula:	C <sub>22</sub> H <sub>33</sub> ClN <sub>6</sub>
Molecular Weight:	416.99
Target:	CRFR
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	R121919 (NBI30775) hydrochloride is a potent and selective CRF1R antagonist with a K <sub>i</sub> of 2 to 5 nM. R121919 hydrochloride has antidepressant and anxiolytic effects. R121919 hydrochloride alleviates defensive withdrawal in rats <sup>[1][2][3]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	CRFR1 2-5 nM (K <sub>i</sub> )
<b>In Vitro</b>	R121919 hydrochloride is a potent small-molecule CRF1 receptor antagonist with high affinity for the CRF1 receptor and over 1000-fold weaker activity at the CRF2 receptor, CRF-binding protein, or 70 other receptor types <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	R121919 (NBI30775) hydrochloride dose dependently decreases adrenocorticopin hormone and Corticosterone (HY-B1618) responses to restraint stress in rats. Peak plasma adrenocorticopin hormone and corticosterone concentrations at a dose of 10 mg/kg R121919 are 9 and 25%, respectively <sup>[1]</sup> . R121919 hydrochloride reduces levels of anxiety in mice with a steep dose-response curve <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

- SSRN. 2023 Jul 18.

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### REFERENCES

[1]. Gutman DA, et al. Behavioral effects of the CRF1 receptor antagonist R121919 in rats selectively bred for high and low activity in the swim test. *Psychoneuroendocrinology*. 2008 Sep;33(8):1093-101.

[2]. Gutman DA, et al. The corticotropin-releasing factor1 receptor antagonist R121919 attenuates the behavioral and endocrine responses to stress. *J Pharmacol Exp Ther*. 2003 Feb;304(2):874-80.

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[3]. Post A, et al. Identification of molecules potentially involved in mediating the in vivo actions of the corticotropin-releasing hormone receptor 1 antagonist, NBI30775 (R121919). *Psychopharmacology (Berl)*. 2005 Jun;180(1):150-8.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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