# PRODUCT INFORMATION



## CP 154,526 (hydrochloride)

Item No. 20732

CAS Registry No.: 257639-98-8

Formal Name: N-butyl-N-ethyl-2,5-dimethyl-7-(2,4,6-

> trimethylphenyl)-7H-pyrrolo[2,3-d] pyrimidin-4-amine, monohydrochloride

MF: C<sub>23</sub>H<sub>32</sub>N<sub>4</sub> • HCl

FW: 401.0 **Purity:** ≥98% UV/Vis.:  $\lambda_{\text{max}}$ : 304 nm Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## **Laboratory Procedures**

CP 154,526 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the CP 154,526 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. CP 154,526 (hydrochloride) is soluble in organic solvents such as ethanol and DMSO. The solubility of CP 154,526 (hydrochloride) in these solvents is approximately 20 mg/ml.

### Description

CP 154,526 is an antagonist of corticotropin-releasing factor receptor 1 (CRF<sub>1</sub>;  $K_i = 2.7$  nM).<sup>1,2</sup> It is selective for CRF<sub>1</sub> over CRF<sub>2</sub> (K<sub>i</sub> = >10 μM).<sup>1</sup> CP 154,526 inhibits CRF-induced increases in adrenocorticotropic hormone (ACTH) levels in rat plasma with an ID<sub>50</sub> value of 10 mg/kg. It increases the time spent in the open arms of the elevated plus maze in rats when administered at a dose of 1 mg/kg.3 CP 154,526 (10 mg/kg, twice per day for 14 days) decreases immobility time in the forced swim test in a rat model of depressive-like behavior.<sup>4</sup> It also decreases stress-induced reinstatement of cocaine or heroin self-administration in cocaine- and heroin-trained rats, respectively, when administered at doses of 15 and 30 mg/kg.5

#### References

- 1. Schulz, D.W., Mansbach, R.S., Sprouse, J., et al. CP-154,526: A potent and selective nonpeptide antagonist of corticotropin releasing factor receptors. Proc. Natl. Acad. Sci. U.S.A. 93(19), 10477-82 (1996).
- 2. Seymour, P.A., Schmidt, A.W., and Schulz, D.W. The pharmacology of CP-154,526, a non-peptide antagonist of the CRH1 receptor: A review. CNS Drug Rev. 9(1), 57-96 (2003).
- Lundkvist, J., Chai, Z., Teheranian, R., et al. A non peptidic corticotropin releasing factor receptor antagonist attenuates fever and exhibits anxiolytic-like activity. Eur. J. Pharmacol. 309(2), 195-200 (1996).
- Overstreet, D.H., Keeney, A., and Hogg, S. Antidepressant effects of citalopram and CRF receptor antagonist CP-154,526 in a rat model of depression. Eur. J. Pharmacol. 492(2-3), 195-201 (2004).
- Shaham, Y., Erb, S., Leung, S., et al. CP-154,526, a selective, non-peptide antagonist of the corticotropin-releasing factor1 receptor attenuates stress-induced relapse to drug seeking in cocaine- and heroin-trained rats. Psychopharmacol. (Berl). 137(2), 184-190 (1998).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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