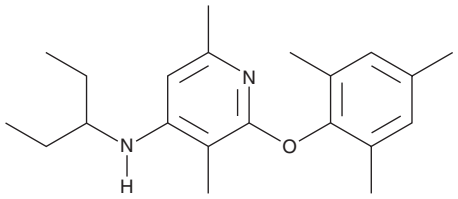
PRODUCT INFORMATION

CP 376,395

Item No. 29188

CAS Registry No.:	175140-00-8
Formal Name:	N-(1-ethylpropyl)-3,6-dimethyl-2-(2,4,6-trimethylphenoxy)-4-pyridinamine
Synonym:	CP 316,311
MF:	$C_{21}H_{30}N_2O$
FW:	326.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 216, 252 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 376,395 is supplied as a crystalline solid. A stock solution may be made by dissolving the CP 376,395 in the solvent of choice, which should be purged with an inert gas. CP 376,395 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CP 376,395 in ethanol and DMF is approximately 30 mg/ml and approximately 15 mg/ml in DMSO.

Description

CP 376,395 is an antagonist of corticotropin-releasing factor (CRF) receptor 1 (CRF_1; IC_{50} = 5.1 nM).[1] It inhibits adenylate cyclase activity stimulated by ovine CRF in rat cerebral cortex and at human CRF_1 receptors. CP 376,395 (17.8 mg/kg) inhibits CRF-induced increases in the acoustic startle response in rats. It increases the percentage of open arm entries and time spent in the open arms of the elevated plus maze in mice when administered *via* intramedial prefrontal cortical injection at doses of 1.5 and 3 nmol.[2] CP 376,395 (10 mg/kg) reduces ethanol consumption in rats trained on an intermittent access schedule.[3] It increases pulmonary ventilation in rats under normocapnic and hypercapnic conditions when injected into the locus coeruleus at a dose of 5 nmol/0.1 µl.[4]

References

1. Chen, Y.L., Obach, R.S., Braselton, J., *et al.* 2-Aryloxy-4-alkylaminopyridines: Discovery of novel corticotropin-releasing factor 1 antagonists. *J. Med. Chem.* **51(5),** 1385-1392 (2008).
2. Miguel, T.T., Gomes, K.S., and Nunes-de-Souza, R.L. Tonic modulation of anxiety-like behavior by corticotropin-releasing factor (CRF) type 1 receptor (CRF1) within the medial prefrontal cortex (mPFC) in male mice: Role of protein kinase A (PKA). *Horm. Behav.* **66(2),** 247-256 (2014).
3. Simms, J.A., Nielsen, C.K., Li, R., *et al.* Intermittent access ethanol consumption dysregulates CRF function in the hypothalamus and is attenuated by the CRF-R1 antagonist, CP-376395. *Addict. Biol.* **19(4),** 606-611 (2014).
4. Incheglu, J.M., Bicego, K.C., and Gargaglioni, L.H. Corticotropin-releasing factor in the locus coeruleus as a modulator of ventilation in rats. *Respir. Physiol. Neurobiol.* **233,** 73-80 (2016).

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