

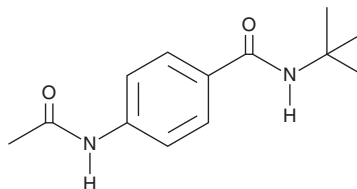
PRODUCT INFORMATION



CPI-1189

Item No. 29187

CAS Registry No.: 183619-38-7
Formal Name: 4-(acetylamino)-N-(1,1-dimethylethyl)-benzamide
MF: C₁₃H₁₈N₂O₂
FW: 234.3
Purity: ≥98%
UV/Vis.: λ_{max}: 265 nm
Supplied as: A 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

CPI-1189 is supplied as a solid. A stock solution may be made by dissolving the CPI-1189 in the solvent of choice, which should be purged with an inert gas. CPI-1189 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CPI-1189 in these solvents is approximately 20 mg/ml.

CPI-1189 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CPI-1189 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. CPI-1189 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CPI-1189 is a benzamide with neuroprotective and anti-inflammatory activities.¹⁻⁵ It inhibits phosphorylation of p38 MAPK in IL-1β-stimulated primary rat astrocytes by 70 to 80% when used at concentrations ranging from 10 to 300 nM.¹ CPI-1189 (20 mg/kg per day) reduces TNF-α-induced apoptosis in the corpus callosum and septum, but not in the neocortex or basal ganglia, as well as reduces TNF-α-induced decreases in GFAP levels in isolated rat brain slices.² It decreases the latency to find the platform in the Morris water maze, indicating reversal of memory deficits, induced by TNF-α in a rat model of AIDS dementia when administered at a dose of 20 mg/kg per day.³ CPI-1189 (30 mg/kg per day) reduces crypt loss and decreases the number of ulcers and inflammatory cells in colonic lesions in mouse models of colitis induced by TNBS or dextran sulfate sodium (DSS; Item No. 23250).^{4,5}

References

1. Hensley, K., Robinson, K.A., Pye, Q.N., *et al.* CPI-1189 inhibits interleukin 1β-induced p38-mitogen-activated protein kinase phosphorylation: An explanation for its neuroprotective properties? *Neurosci. Lett.* **281(2-3)**, 179-182 (2000).
2. Bjugstad, K.B., Flitter, W.D., Garland, W.A., *et al.* CPI-1189 prevents apoptosis and reduces glial fibrillary acidic protein immunostaining in a TNF-α infusion model for AIDS dementia complex. *J. Neurovirol.* **6(6)**, 478-491 (2000).
3. Bjugstad, K.B., Flitter, W.D., Garland, W.A., *et al.* Preventive actions of a synthetic antioxidant in a novel animal model of AIDS dementia. *Brain Res.* **795(1-2)**, 349-357 (1998).
4. Greenwood-Van Meerveld, B. and Tyler, K. CPI-1189 protects against TNBS-induced colitis in a rodent model. *Am. J. Pharmacol. Toxicol.* **2(2)**, 30-38 (2007).
5. Greenwood-Van Meerveld, B. and Tyler, K.R. CPI-1189 protects against dextran sulfate sodium-induced colitis in mice. *Am. J. Pharmacol. Toxicol.* **1(3)**, 54-59 (2006).

WARNING

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

SAFETY DATA

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.

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