# PRODUCT INFORMATION



# JTC 801

Item No. 21254

CAS Registry No.: 244218-51-7

Formal Name: N-(4-amino-2-methyl-6-quinolinyl)-2-[(4-

ethylphenoxy)methyl]-benzamide, monohydrochloride

MF: C<sub>26</sub>H<sub>25</sub>N<sub>3</sub>O<sub>2</sub> • HCl

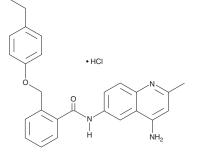
448.0 FW: **Purity:** ≥98%

 $\lambda_{\text{max}}$ : 223, 270, 311, 341 nm A crystalline solid UV/Vis.:

Supplied as:

Storage: -20°C Stability: ≥4 years

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



## **Laboratory Procedures**

JTC 801 is supplied as a crystalline solid. A stock solution may be made by dissolving the JTC 801 in the solvent of choice, which should be purged with an inert gas. JTC 801 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of JTC 801 in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

JTC 801 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, JTC 801 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. JTC 801 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

JTC 801 is an antagonist of the nociceptin receptor (ORL1;  $K_i$  = 44.5 nM;  $IC_{50}$  = 94 nM) that is >100-, >100-, and >3-fold more selective for ORL1 over the related δ-, κ-, and μ-opioid receptors, respectively. It demonstrates anti-nociceptive effects in acute pain models in mice upon oral administration at 1 mg/kg.1

### Reference

1. Yamada, H. Nakamoto, H., Suzuki, Y., et al. Pharmacological profiles of a novel opioid receptor-like1 (ORL(1)) receptor antagonist, JTC-801. Br. J. Pharmacol. 135(2), 323-332 (2002).

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.

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