# **PRODUCT** INFORMATION



**JTC 801** 

Item No 21254

7	
ethylphenoxy)methyl]-benzamide, monohydrochloride	• HCI
$C_{26}H_{25}N_{3}O_{2} \bullet HCI$	
448.0	
≥98%	
λ <sub>may</sub> : 223, 270, 311, 341 nm	N N
A crystalline solid	
-20°C	
As supplied, 2 years from the QC date provided on the stored properly	Certificate of Analysis, when
	448.0 ≥98% λ <sub>max</sub> : 223, 270, 311, 341 nm A crystalline solid -20°C As supplied, 2 years from the QC date provided on the

## 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. JTC 801 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. 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<sub>50</sub> = 94 nM) that is >100-, >100-, and >3-fold more selective for ORL1 over the related  $\delta$ -,  $\kappa$ -, and  $\mu$ -opioid receptors, respectively.<sup>1</sup> It demonstrates anti-nociceptive effects in acute pain models in mice upon oral administration at 1 mg/kg.<sup>1</sup>

## 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.

### 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.

## WARRANTY AND LIMITATION OF REMEDY

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