

# PRODUCT INFORMATION



## LP44 (hydrochloride)

Item No. 17287

**CAS Registry No.:** 824958-12-5  
**Formal Name:** 4-[2-(methylthio)phenyl]-N-(1,2,3,4-tetrahydro-1-naphthalenyl)-1-piperazinehexanamide, monohydrochloride

**MF:** C<sub>27</sub>H<sub>37</sub>N<sub>3</sub>OS • HCl

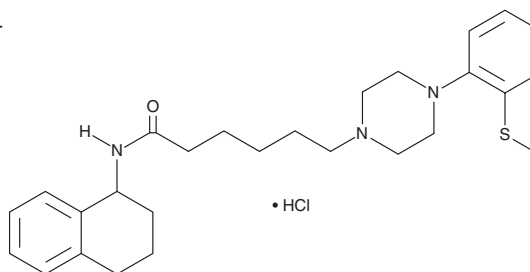
**FW:** 488.1

**Purity:** ≥98%

**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

LP44 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the LP44 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. LP44 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of LP44 (hydrochloride) in these solvents is approximately 10 mg/ml.

LP44 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, LP44 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. XX has a solubility of approximately 0.25 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

LP44 is a full agonist of the serotonin 5-HT<sub>7</sub> receptor (K<sub>i</sub> = 0.22 nM) that displays 200- and greater than 1,000-fold selectivity over 5-HT<sub>1A</sub> (K<sub>i</sub> = 52.7 nM) and 5-HT<sub>2A</sub> (K<sub>i</sub> = 326 nM) receptors, respectively.<sup>1</sup> It can induce relaxation of substance P-induced guinea pig ileum contraction with an EC<sub>50</sub> value of 2.56 μM.<sup>1</sup>

### Reference

1. Leopoldo, M., Berardi, F., Colabufo, N.A., *et al.* Structure-affinity relationship study on N-(1,2,3,4-tetrahydronaphthalen-1-yl)-4-aryl-1-piperazinealkylamides, a new class of 5-hydroxytryptamine<sub>7</sub> receptor agents. *J. Med. Chem* **47**, 6616-6624 (2004).

#### 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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