

# PRODUCT INFORMATION

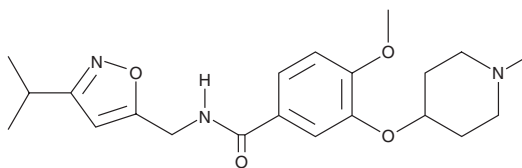


## ML-352

Item No. 21878

**CAS Registry No.:** 1649450-12-3  
**Formal Name:** 4-methoxy-N-[[3-(1-methylethyl)-5-isoxazolyl]methyl]-3-[(1-methyl-4-piperidyl)oxy]-benzamide

**MF:** C<sub>21</sub>H<sub>29</sub>N<sub>3</sub>O<sub>4</sub>  
**FW:** 387.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 212, 257 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

ML-352 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-352 in the solvent of choice, which should be purged with an inert gas. ML-352 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ML-352 in ethanol is approximately 5 mg/ml and approximately 20 mg/ml in DMSO and DMF.

ML-352 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-352 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ML-352 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

ML-352 is a noncompetitive inhibitor of the presynaptic choline transporter (CHT) with K<sub>i</sub> values of 92 and 166 nM for HEK293 cells expressing human CHT and mouse forebrain synaptosomes, respectively.<sup>1</sup> It is selective for CHT over dopamine, norepinephrine, and serotonin transporters in HEK293 cells expressing human transporters when used at a concentration of 5 μM as well as a panel of 68 G protein-coupled receptors, ion channels, and transporters when used at a concentration of 10 μM. ML-352 (5 μM) increases cell surface expression of CHT without affecting total protein levels.

### Reference

1. Ennis, E.A., Wright, J., Retzlaff, C.L., *et al.* Identification and characterization of ML352: A novel, noncompetitive inhibitor of the presynaptic choline transporter. *ACS Chem. Neurosci.* **6**(3), 417-427 (2015).

#### 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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