

# PRODUCT INFORMATION

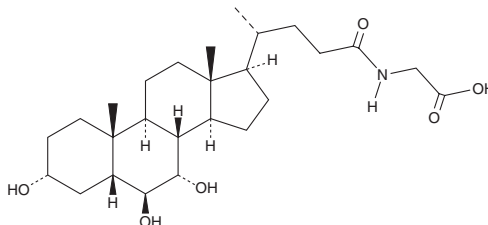


## Opiranserin (hydrochloride)

Item No. 45056

**CAS Registry No.:** 1440796-75-7  
**Formal Name:** 4-butoxy-N-[[4-(dimethylamino) tetrahydro-2H-pyran-4-yl] methyl]-3,5-dimethoxy-benzamide, monohydrochloride

**Synonym:** VVZ-149  
**MF:** C<sub>21</sub>H<sub>34</sub>N<sub>2</sub>O<sub>5</sub> • HCl  
**FW:** 431.0  
**Purity:** ≥98%  
**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

Opiranserin (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the opiranserin (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Opiranserin (hydrochloride) is slightly soluble (0.1-1 mg/ml) in DMSO and a 1:1 solution of acetonitrile:water.

### Description

Opiranserin is a non-opioid analgesic.<sup>1</sup> It is an inhibitor of glycine transporter 2 (GlyT2; IC<sub>50</sub> = 0.86 μM) and an antagonist of the serotonin (5-HT) receptor subtype 5-HT<sub>2A</sub> and the purinergic P2X<sub>3</sub> receptor (IC<sub>50</sub>s = 1.3 and 0.87 μM, respectively). *In vivo*, opiranserin reduces mechanical allodynia in a rat model of neuropathic pain induced by spinal nerve ligation (ED<sub>50</sub> = 80 mg/kg). Formulations containing opiranserin have been used in the treatment of acute postoperative pain.

### Reference

1. Pang, M.-H., Kim, Y., Jung, K.W., *et al.* A series of case studies: Practical methodology for identifying antinociceptive multi-target drugs. *Drug Discov. Today* **17(9-10)**, 425-434 (2012).

#### 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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