

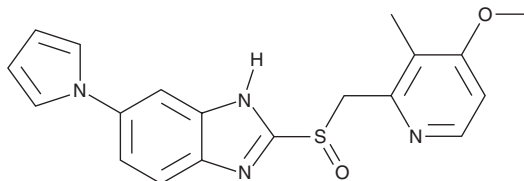
# PRODUCT INFORMATION



## Ilaprazole

Item No. 30120

**CAS Registry No.:** 172152-36-2  
**Formal Name:** 2-[[[4-methoxy-3-methyl-2-pyridinyl)methyl]sulfinyl]-6-(1H-pyrrol-1-yl)-1H-benzimidazole (R,S)-Ilaprazole, IY-81149  
**Synonyms:**  
**MF:** C<sub>19</sub>H<sub>18</sub>N<sub>4</sub>O<sub>2</sub>S  
**FW:** 366.4  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

Ilaprazole is supplied as a solid. A stock solution may be made by dissolving the ilaprazole in the solvent of choice, which should be purged with an inert gas. Ilaprazole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of ilaprazole in these solvents is approximately 0.3, 15, and 10 mg/ml, respectively.

Ilaprazole is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ilaprazole should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ilaprazole has a solubility of approximately 0.12 mg/ml in a 1:7 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Ilaprazole is a proton pump inhibitor that inhibits H<sup>+</sup>/K<sup>+</sup>-ATPase activity in isolated rabbit gastric mucosa (IC<sub>50</sub> = 6 μM).<sup>1</sup> *In vivo*, ilaprazole reduces gastric acid secretion induced by pentagastrin (Item No. 28546) or histamine in anesthetized rats (ED<sub>50</sub>s = 0.38 and 1.2 mg/kg, respectively). It also reduces histamine-induced gastric acid secretion in Heidenhain pouch dogs. Formulations containing ilaprazole have been used in the treatment of peptic ulcers and gastroesophageal reflux disease (GERD).

### Reference

1. Kwon, D., Chae, J.B., Park, C.W., *et al.* Effects of IY-81149, a newly developed proton pump inhibitor, on gastric acid secretion in vitro and in vivo. *Arzneimittelforschung* **51(3)**, 204-213 (2001).

#### 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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