

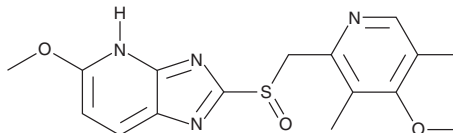
# PRODUCT INFORMATION



## Tenatoprazole

Item No. 18717

CAS Registry No.: 113712-98-4  
Formal Name: 5-methoxy-2-[[[4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-3H-imidazo[4,5-b]pyridine  
Synonym: TU-199  
MF: C<sub>16</sub>H<sub>18</sub>N<sub>4</sub>O<sub>3</sub>S  
FW: 346.4  
Purity: ≥98%  
UV/Vis.: λ<sub>max</sub>: 306 nm  
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

Tenatoprazole is supplied as a solid. A stock solution may be made by dissolving the tenatoprazole in the solvent of choice. Tenatoprazole is soluble in the organic solvent methanol at a concentration of approximately 10 mg/ml.

### Description

Tenatoprazole is a proton pump inhibitor, blocking hog gastric H<sup>+</sup>/K<sup>+</sup>-ATPase activity with an IC<sub>50</sub> value of 6.2 μM.<sup>1</sup> It is orally bioavailable, blocking induced gastric acid secretion and ulcer formation in rats and humans.<sup>1-3</sup> Tenatoprazole has a prolonged plasma half-life resulting in persistent effectiveness after withdrawal.<sup>3</sup>

### References

1. Uchiyama, K., Wakatsuki, D., Kakinoki, B., *et al.* Effects of TU-199, a novel H<sup>+</sup>, K<sup>(+)</sup>-ATPase inhibitor, on gastric acid secretion and gastroduodenal ulcers in rats. *Methods Find. Exp. Clin. Pharmacol.* **21**(2), 115-122 (1999).
2. Galmiche, J. P., Bruley Des Varannes, S., Ducrotté, P., *et al.* Tenatoprazole, a novel proton pump inhibitor with a prolonged plasma half-life: Effects on intragastric pH and comparison with esomeprazole in healthy volunteers. *Aliment Pharmacol. Ther.* **19**(6), 655-662 (2004).
3. Hunt, R. H., Armstrong, D., James, C., *et al.* Effect on intragastric pH of a PPI with a prolonged plasma half-life: Comparison between tenatoprazole and esomeprazole on the duration of acid suppression in healthy male volunteers. *Am. J. Gastroenterol.* **100**(9), 1949-1956 (2005).

#### 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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