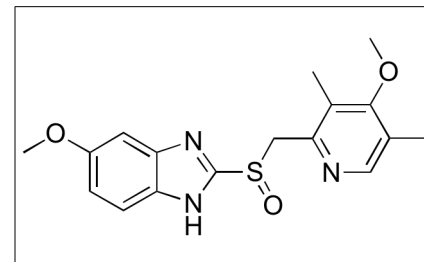


Product Information

Product ID O4917
CAS No. 73590-58-6
Chemical Name 5-Methoxy-2-[[[4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole
Synonym Antra, Gastrogard, Losec, Mepral, Omepral, Parizac' Prilosec, Zoltum
Formula C₁₇H₁₉N₃O₃S
Formula Wt. 345.42
Melting Point 156 °C
Purity ≥98%
Solubility Soluble in ethanol or methanol. Slightly soluble in acetone, isopropanol, or water.
Store Temp 4 °C
Ship Temp Ambient



Bulk quantities available upon request

Product ID	Size
O4917	500 mg
O4917	1 g
O4917	5 g
O4917	10 g

Description Omeprazole is a proton pump inhibitor (PPI) that acts as an antagonist at H⁺/K⁺ ATPases and is clinically used to treat gastroesophageal reflux disease (GERD), dyspepsia, and peptic ulcer disease. Omeprazole exhibits antacid, anti-ulcerative, and anti-diabetic activities; it also inhibits the mitochondrial carnitine/acylcarnitine transporter. Omeprazole decreases blood glucose levels and Hb1Ac, improves glucose tolerance, and induces B cell neogenesis and activation.

References Tonazzi A, Eberini I, Indiveri C. Molecular mechanism of inhibition of the mitochondrial carnitine/acylcarnitine transporter by omeprazole revealed by proteoliposome assay, mutagenesis and bioinformatics. *PLoS One*. 2013 Dec 9;8(12):e82286. PMID: 24349247.

Ward RM, Kearns GL. Proton pump inhibitors in pediatrics : mechanism of action, pharmacokinetics, pharmacogenetics, and pharmacodynamics. *Paediatr Drugs*. 2013 Apr;15(2):119-31. PMID: 23512128.

Mefford IN, Mefford JT, Burris CA. Improved diabetes control and pancreatic function in a type 2 diabetic after omeprazole administration. *Case Rep Endocrinol*. 2012;2012:468609. PMID: 22937295.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.