



LKT Laboratories, Inc.

Pantoprazole

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Product Information

Product ID P0255
CAS No. 102625-70-7
Chemical Name 5-(Difluoromethoxy)-2-[[[(3,4-dimethoxy-2-pyridinyl)- methyl]sulfinyl]-1H-benzimidazole

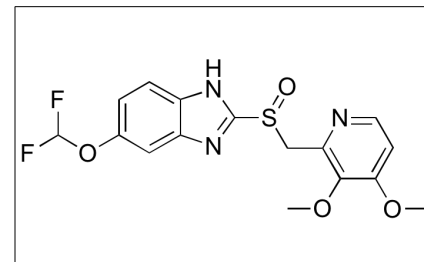
Synonym SKF-96022, BY-1023

Formula C₁₆H₁₅F₂N₃O₄S
Formula Wt. 383.37
Melting Point 139-140° C (dec)
Purity ≥98%
Solubility Soluble in methanol.
Soluble in water (48 mg/ml).

Store Temp -20° C

Ship Temp Ambient

Description Pantoprazole is an H⁺/K⁺ ATPase inhibitor that exhibits antacid, anti-parasitic, and anticancer chemotherapeutic activities. Pantoprazole is clinically used to treat gastroesophageal reflux disease (GERD), although its inhibition of ROCK-2 causes a decrease in gastroesophageal sphincter muscle tone. In *Trichomonas*, pantoprazole inhibits uridine nucleoside ribohydrolase activity. Additionally, pantoprazole increases tumor-associated macrophage recruitment in the tumor microenvironment, inhibiting tumor growth in vivo.



Bulk quantities available upon request

Product ID	Size
P0255	100 mg
P0255	500 mg
P0255	1 g

References Welsh C, Kasirer MY, Pan J, et al. Pantoprazole decreases gastroesophageal muscle tone in newborn rats via rho-kinase inhibition. *Am J Physiol Gastrointest Liver Physiol.* 2014 Apr 3. [Epub ahead of print]. PMID: 24699328.

Shea TA, Burburan PJ, Matubia VN, et al. Identification of proton-pump inhibitor drugs that inhibit *Trichomonas vaginalis* uridine nucleoside ribohydrolase. *Bioorg Med Chem Lett.* 2014 Feb 15;24(4):1080-4. PMID: 24468412.

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.

Vishvakarma NK, Singh SM. Immunopotentiating effect of proton pump inhibitor pantoprazole in a lymphoma-bearing murine host: Implication in antitumor activation of tumor-associated macrophages. *Immunol Lett.* 2010 Nov 30;134(1):83-92. PMID: 20837061.

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