

Product Data Sheet

Product Name: Esomeprazole Magnesium

Cat. No.: GC14313

Chemical Properties

Cas. No. 161973-10-0

Chemical Name magnesium;5-methoxy-2-[(4-methoxy-3,5-dimethylpyridin-2-yl)methylsulfinyl]benzimidazol-1-ide

SMILES CC1=CN=C(C(=C1OC)C)CS(=O)C2=NC3=C([N-]2)C=CC(=C3)OC.CC1=CN=C(C(=C1OC)C)CS(=O)C2=NC3=C([N-]2)C=CC(=C3)OC.[Mg+2]

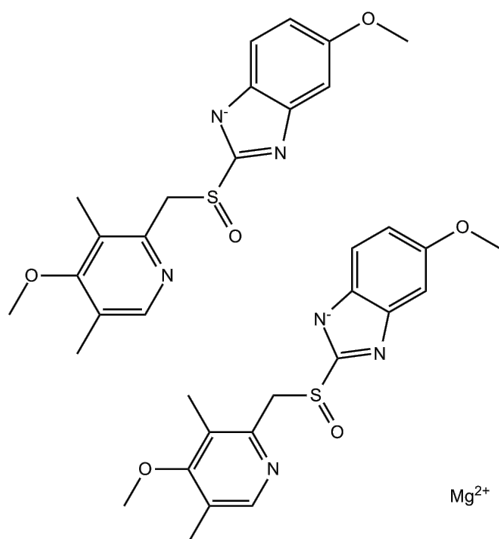
Formula $C_{34}H_{36}MgN_6O_6S_2$ M.Wt 713.12

Solubility $\geq 20.15\text{mg/mL}$ in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37°C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Protocol

Caution: Product has not been fully validated for medical applications. For research use only.

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Animal experiment: Mice[1] In this 10-day supplementation experiment, mice (n = 10/group) receive the following: 1) as a control group, only the vehicle for dissolution of Esomeprazole (PEG-400) given orally once daily by gastric gavage; 2) Esomeprazole 0.5 mg/kg in an equivalent volume of PEG-400 given orally once daily by gastric lavage; 3) Esomeprazole 5 mg/kg in an equivalent volume of PEG-400 given orally once daily by gastric lavage; and 4) Esomeprazole 50 mg/kg in an equivalent volume of PEG-400 given orally once daily by gastric lavage[1].

References:

[1]. Koch TR, et al. Effect of the H, K-ATPase inhibitor, esomeprazole magnesium, on gut total antioxidant capacity in mice. J Nutr Biochem. 2004 Sep;15(9):522-6.

Background

Esomeprazole magnesium is an inhibitor of H⁺, K⁺-ATPase, effectively used in the research of upper intestinal disorder.

Esomeprazole magnesium is an inhibitor of H⁺, K⁺-ATPase[1].

Esomeprazole magnesium (0.5, 5, 50 mg/kg/day, p.o.) produces increased gastric total antioxidant capacity, decreases gastric lipid peroxide levels, significantly increases superoxide dismutase levels, but shows no obvious effect on colonic lipid peroxide levels in mice[1].

References:

[1]. Koch TR, et al. Effect of the H, K-ATPase inhibitor, esomeprazole magnesium, on gut total antioxidant capacity in mice. J Nutr Biochem. 2004 Sep;15(9):522-6.

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