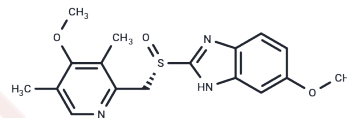


Esomeprazole

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 119141-88-7 |
| Formula: | C ₁₇ H ₁₉ N ₃ O ₃ S |
| Molecular Weight: | 345.42 |
| Storage: | Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small> |



Biological Description

| | |
|---------------|---|
| Description | Esomeprazole is the S-isomer of omeprazole, inhibits the lysosomal cysteine protease legumain to prevent cancer metastasis. Esomeprazole is a proton pump inhibitors (PPI). |
| Targets(IC50) | Proton pump,Antibacterial,Cysteine Protease |
| In vivo | In an orthotopic transplantation nude mouse model, Esomeprazole reduced lung metastasis of MDA-MB-231 breast cancer cells[1]. |

Solubility Information

| | |
|------------|--|
| Solubility | DMSO: 1 mg/mL (2.9 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|--|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 2.895 mL | 14.4751 mL | 28.9503 mL |
| 5 mM | 0.579 mL | 2.895 mL | 5.7901 mL |
| 10 mM | 0.2895 mL | 1.4475 mL | 2.895 mL |
| 50 mM | 0.0579 mL | 0.2895 mL | 0.579 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Zhao T, et al. Esomeprazole inhibits the lysosomal cysteine protease legumain to prevent cancer metastasis. Invest New Drugs. 2021 Apr;39(2):337-347.

Vachhani R, et al. Esomeprazole: a proton pump inhibitor. Expert Rev Gastroenterol Hepatol. 2009 Feb;3(1):15-27.

Qi Q, et al. Comparative effectiveness and tolerability of esomeprazole and omeprazole in gastro-esophageal reflux disease: A systematic review and meta-analysis. Int J Clin Pharmacol Ther. 2015 Oct;53(10):803-10.

Jankowski JAZ, et al. Esomeprazole and aspirin in Barrett's oesophagus (AspECT): a randomised factorial trial. Lancet. 2018 Aug 4;392(10145):400-408.

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