Rabeprazole (sodium salt)

Item No. 14939

CAS Registry No.: 117976-90-6
Formal Name: 2-[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl][methyl]sulfinyl]-1H-benimidazol-1-ium, monosodium salt

Synonyms: Aciphex™, E 3810, LY307640, Pariet™, Pepcia, Rabicid
MF: C_{18}H_{21}N_{3}O_{3}S • Na
FW: 382.4
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}= 285 nm

Laboratory Procedures

For long term storage, we suggest that rabeprazole (sodium salt) be stored as supplied at -20°C. It should be stable for at least two years.

Rabeprazole (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the rabeprazole (sodium salt) in the solvent of choice. Rabeprazole (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of rabeprazole (sodium salt) in ethanol and DMF is approximately 30 mg/ml and in DMSO it is approximately 25 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of rabeprazole (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of rabeprazole (sodium salt) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Rabeprazole is a selective and irreversible inhibitor of the gastric H⁺/K⁺ ATPase pump (IC₅₀ = 72 nM). It can be activated more rapidly and over a greater pH range than other proton pump inhibitors such as omeprazole (Item No. 14880), lansoprazole (Item No. 13627), and pantoprazole. Rabeprazole is metabolized by the cytochrome P450 (CYP) isomers CYP2C19 and CYP3A4. It also has in vitro antibacterial activity against H. pylori (IC₅₀ = 0.29 μM).

References

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/14939

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS, NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent to you by the manufacturer.

WARRANTY AND LIMITATION OF REMEDY
Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery. Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence. This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.