PRODUCT INFORMATION



Lansoprazole sulfone

Item No. 22569

CAS Registry No.: 131926-99-3

Formal Name: 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-

pyridinyl]methyl]sulfonyl]-1H-benzimidazole

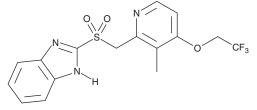
Synonym:

MF: $C_{16}H_{14}F_3N_3O_3S$

385.4 FW: ≥98% **Purity:** UV/Vis.: λ_{max} : 281 nm Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



Laboratory Procedures

Lansoprazole sulfone is supplied as a crystalline solid. A stock solution may be made by dissolving the lansoprazole sulfone in the solvent of choice, which should be purged with an inert gas. Lansoprazole sulfone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of lansoprazole sulfone in ethanol is approximately 5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Lansoprazole sulfone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, lansoprazole sulfone should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Lansoprazole sulfone has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Lansoprazole sulfone is a phase I metabolite of lansoprazole (Item Nos. 13627 | 21967 | 18235).1 Lansoprazole is a proton pump inhibitor that inactivates the hydrogen/potassium-stimulated ATPase pumps in parietal cells, thus inhibiting gastric acid secretion and increasing intragastric pH.² Lansoprazole is metabolized by the cytochrome P450 (CYP) isoform CYP3A4 to form lansoprazole sulfone.¹

References

- 1. Meyer, U.A. Interaction of proton pump inhibitors with cytochromes P450: Consequences for drug interactions. Yale J. Biol. Med. 69(3), 203-209 (1996).
- 2. Schubert, M.L. Pharmacotherapy for acid/peptic disorders. Yale J. Biol. Med. 69(2), 197-201 (1996).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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