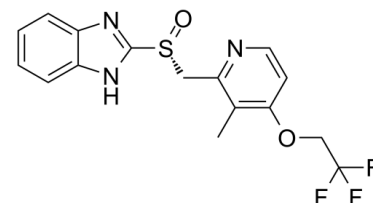


Data Sheet

Product Name:	(R)-Lansoprazole
Cat. No.:	CS-2820
CAS No.:	138530-94-6
Molecular Formula:	C ₁₆ H ₁₄ F ₃ N ₃ O ₂ S
Molecular Weight:	369.36
Target:	Proton Pump
Pathway:	Membrane Transporter/Ion Channel
Solubility:	H ₂ O : < 0.1 mg/mL (insoluble)



BIOLOGICAL ACTIVITY:

(R)-Lansoprazole is a proton pump inhibitor which prevents the stomach from producing acid. Target: Proton Pump. Lansoprazole sodium is sodium salt form of lansoprazole, lansoprazole, a substituted benzimidazole proton pump inhibitor, on pharmacokinetics and metabolism of theophylline has been studied in healthy adults given oral lansoprazole 30 mg once daily for 11 days. On Days 4 and 11 of 300 mg aminophylline was simultaneously administered orally and blood samples for theophylline analysis were taken over 24 h [1]. Patients in the lansoprazole group were significantly less likely to have a recurrence of ulcer complications than patients in the placebo group (P=0.008). There was no significant difference in mortality between the two groups [2]. Lansoprazole (AG-1749) and omeprazole, were found to have significant activities against this organism. The activity of lansoprazole was comparable to that of bismuth citrate, with MICs ranging from 3.13 to 12.5 micrograms/ml, and fourfold more potent than that of omeprazole [3].

References:

- [1]. Kokufu, T., et al., Effects of lansoprazole on pharmacokinetics and metabolism of theophylline. *Eur J Clin Pharmacol*, 1995. 48(5): p. 391-5.
- [2]. Lai, K.C., et al., Lansoprazole for the prevention of recurrences of ulcer complications from long-term low-dose aspirin use. *N Engl J Med*, 2002. 346(26): p. 2033-8.
- [3]. Iwahi, T., et al., Lansoprazole, a novel benzimidazole proton pump inhibitor, and its related compounds have selective activity against *Helicobacter pylori*. *Antimicrob Agents Chemother*, 1991. 35(3): p. 490-6.

CAIndexNames:

1H-Benzimidazole, 2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-

SMILES:

O=[S@@](C1=NC2=CC=CC=C2N1)CC3=NC=CC(OCC(F)(F)F)=C3C

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

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