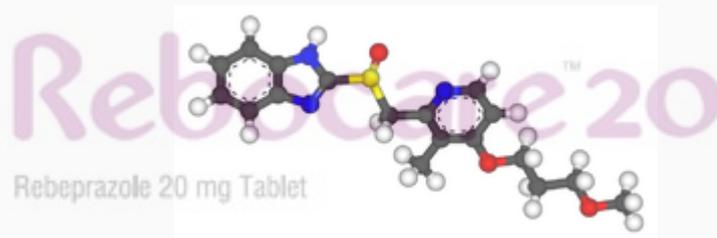
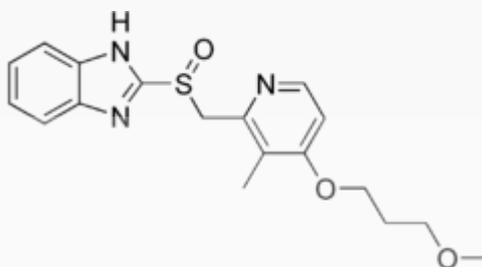


Rabeprazole

Rabeprazole



Systematic (IUPAC) name

(*RS*)-2-([4-(3-methoxypropoxy)-3-methylpyridin-2-yl]methylsulfinyl)-1*H*-benzo[*d*]imidazole

Clinical data

<u>Trade names</u>	Aciphex, Acifix (by Beximco)
<u>AHFS/Drugs.com</u>	monograph
<u>MedlinePlus</u>	a699060
<u>Licence data</u>	US FDA:Finix&SearchType=BasicSearch link
<u>Pregnancy cat.</u>	B (US)
<u>Legal status</u>	POM (UK) R-only (US)
<u>Routes</u>	Oral

Pharmacokinetic data

<u>Bioavailability</u>	52%
<u>Metabolism</u>	mostly non-enzymatic, partly hepatic (CYP2C19)
<u>Half-life</u>	1 - 1.5 hours
<u>Excretion</u>	90% renal

Identifiers

<u>CAS number</u>	117976-89-3
<u>ATC code</u>	A02BC04
<u>PubChem</u>	CID 5029
<u>DrugBank</u>	DB01129
<u>ChemSpider</u>	4853
<u>UNII</u>	32828355LL
<u>ChEBI</u>	CHEBI:8768
<u>ChEMBL</u>	CHEMBL1219
<u>PDB ligand ID</u>	RZX (PDBe , RCSB PDB)

Chemical data

<u>Formula</u>	<u>C₁₈H₂₁N₃O₃S</u>
<u>Mol. mass</u>	359.444 g/mol
<u>SMILES</u>	<ul style="list-style-type: none"> <chem>O=S(c2nc1ccccc1n2)Cc3nccc(OCCCC)c3C</chem>
<u>InChI</u>	

InChI=1S/C18H21N3O3S/c1-13-16(19-9-8-17(13)24-11-5-10-23-2)12-25(22)18-20-14-6-3-4-7-15(14)21-18/h3-4,6-9H,5,10-12H2,1-2H3,(H,20,21)

Key:YREYEVIYCVEVJK-UHFFFAOYSA-N

Rabeprazole /ˌræ.ˈbɛp.ræ.zoːl/ is an antiulcer drug in the class of proton pump inhibitors. It was developed by Eisai Co. and is marketed by Janssen-Cilag as the sodium salt under the brand names **AcipHex** (/ˈæ.sɪf.ɛks/, referring to pH) in the US, **Pariet** in Europe, Brazil, Canada, Japan, Russia and Australia. Rabonik in India, and Zechin in Pakistan. In Bangladesh Rabeprazole is sold under the brand name of Acifix by Beximco Pharma

Indications and usage

Short-term treatment in healing and symptomatic relief of duodenal ulcers and erosive or ulcerative gastroesophageal reflux disease (GORD); maintaining healing and reducing relapse rates of heartburn symptoms in patients with GORD; treatment of daytime and nighttime heartburn and other symptoms associated with GORD; long-term treatment of pathological hypersecretory conditions, including Zollinger-Ellison syndrome and in combination with amoxicillin and clarithromycin to eradicate Helicobacter pylori.

- Gastric ulcer (GU)
- Peptic ulcer disease (PUD)
- Maintenance of healing of erosive or ulcerative GORD
- Healing of erosive and ulcerative GORD
- Healing of duodenal ulcers.
- Treatment of symptomatic GORD
- Treatment of pathological hypersecretory conditions (Zollinger-Ellison syndrome)
- Helicobacter pylori eradication to reduce risk of duodenal ulcer recurrence

Contraindications

- hypersensitivity to rabeprazole, substituted benzimidazoles or any of components of its pharmaceutical forms.
- lactation: Thomson Lactation Ratings: Infant risk cannot be ruled out.

Restriction of usage

- acute hepatic failure
- pediatric use in patients under 18 years of age (there are insufficient data about safety and efficiency of rabeprazole in this group of patients)

Side effects

Rabeprazole adverse reactions/side effects include^[citation needed].

- In clinical trials the most common side effect assessed as possibly or probably related to AcipHex was headache in 2.4% of patients vs 1.6% taking placebo.
- abdominal pains
- anxiety
- arthralgia
- asthenia
- constipation
- diarrhea
- dry mouth
- erythema
- granulocytopenia

- headache
- increased or decreased appetite
- insomnia
- leukocytopenia
- meteorism
- muscle or bone pain
- myalgia
- nausea
- skin eruption
- thrombocytopenia
- vertigo
- vomiting

Antacid preparations such as rabeprazole by suppressing acid mediated break down of proteins, leads to an elevated risk of developing food or drug allergies. This happens due to undigested proteins then passing into the gastrointestinal tract where sensitisation occurs. It is unclear whether this risk occurs with only long-term use or with short-term use as well.^[1]

Drug interactions

Rabeprazole decreases the concentration of ketoconazole in the plasma (in 33%), increases the concentration of digoxin (in 22%), and does not interact with liquid antacids. Rabeprazole is compatible with any medicine metabolized by the CYP450 (theophylline, warfarin, diazepam, phenytoin).

Overdosage

Studies in mice and rats indicated the symptoms of acute toxicity due to overdose included: hypoactivity, labored respiration, convulsion, diarrhea, tremor, and coma. A study in dogs indicated that a dose of 2000mg/kg was not lethal.

References

1. [^]Pali-Schöll I, Jensen-Jarolim E (April 2011). "Anti-acid medication as a risk factor for food allergy". *Allergy* **66** (4): 469–77. doi:10.1111/j.1398-9995.2010.02511.x. PMID 21121928.