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Esomeprazole

National Cancer Institute

Source

National Cancer Institute. *Esomeprazole*. NCI Thesaurus. Code C65538.

The S-isomer of omeprazole, with gastric proton pump inhibitor activity. In the acidic compartment of parietal cells, esomeprazole is protonated and converted into the active achiral sulfenamide; the active sulfenamide forms one or more covalent disulfide bonds with the proton pump hydrogen-potassium adenosine triphosphatase (H⁺/K⁺ ATPase), thereby inhibiting its activity and the parietal cell secretion of H⁺ ions into the gastric lumen, the final step in gastric acid production. H⁺/K⁺ ATPase is an integral membrane protein of the gastric parietal cell.