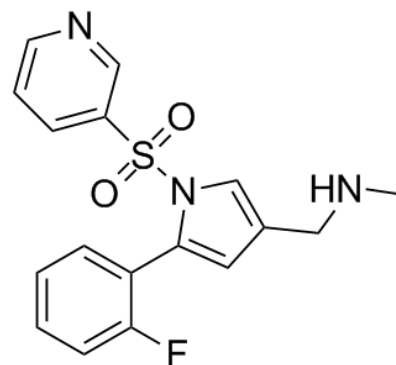


**Product Name** : TAK-438 free base  
**Cat. No.** : PC-42022  
**CAS No.** : 881681-00-1  
**Molecular Formula** : C<sub>17</sub>H<sub>16</sub>FN<sub>3</sub>O<sub>2</sub>S  
**Molecular Weight** : 345.3912  
**Target** : Proton Pump  
**Solubility** : DMSO: ≥ 33 mg/mL



### Biological Activity

A novel potent, oral potassium-competitive acid blocker (P-CAB) that potently inhibits H<sup>+</sup>,K<sup>+</sup>-ATPase with IC<sub>50</sub> of 19 nM; completely inhibits basal and 2-deoxy-d-glucose-stimulated gastric acid secretion in rats (4mg/kg, p.o.); increases the pH of gastric perfusate to a higher value, and sustains longer than those of lansoprazole or SCH28080; a clinical candidate for the treatment of gastroesophageal reflux disease (GERD), peptic ulcer, and other acid-related diseases.

Ulcer

Phase 3 Clinical

### References

Arikawa Y, et al. J Med Chem. 2012 May 10;55(9):4446-56.

Hori Y, et al. J Pharmacol Exp Ther. 2010 Oct;335(1):231-8.

Shin JM, et al. J Pharmacol Exp Ther. 2011 Nov;339(2):412-20.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

E-mail: tech@probechem.com