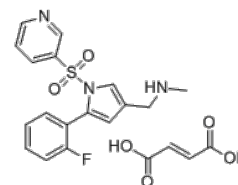


Product Name : TAK-438
Cat. No. : PC-60826
CAS No. : 1260141-27-2
Molecular Formula : C₂₁H₂₀FN₃O₆S
Molecular Weight : 461.464
Target : Proton Pump
Solubility : 10 mM in DMSO



Biological Activity

TAK-438 (Vonoprazan) is a novel potent, potassium-competitive acid blocker (P-CAB) that inhibits **H(+),K(+)-ATPase** activity in porcine gastric microsomes with IC₅₀ of 19 nM at pH 6.5.

The inhibitory activity of TAK-438 is unaffected by ambient pH, but not SCH28080 and lansoprazole.

TAK-438 completely inhibits basal and 2-deoxy-d-glucose-stimulated gastric acid secretion in rats at 4 mg/kg (as the free base) orally;

TAK-438 is a more potent and longer-lasting inhibitory action on gastric acid secretion than either lansoprazole or SCH28080.

References

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

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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!

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