

# Ebrotidine

**Catalog No: tcsc1391**



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

100981-43-9

**Formula:**

$C_{14}H_{17}BrN_6O_2S_3$

**Pathway:**

Immunology/Inflammation;GPCR/G Protein

**Target:**

Histamine Receptor;Histamine Receptor

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 100 mg/mL (209.46 mM; Need ultrasonic)

**Alternative Names:**

FI3542

**Observed Molecular Weight:**

477.42

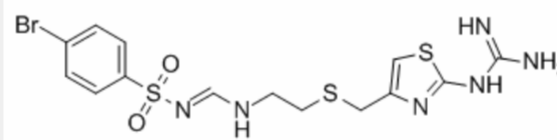
## Product Description

Ebrotidine(FI 3542) is a competitive H<sub>2</sub>-receptor antagonist (K<sub>i</sub>= 127.5 nM) with a potent antisecretory activity and evidenced gastroprotection.

IC<sub>50</sub> Value: 127.5 nM (K<sub>i</sub>)[1]; 0.21mg/kg (ED<sub>50</sub>, histamine- stimulated acid secretion) [2]

Target: H<sub>2</sub> receptor

in vitro: Ebrotidine displaced 3H-thiotidine specific binding to histamine H<sub>2</sub>-receptors (K<sub>i</sub>: 127.5 nmol/l), showing a higher affinity (p  
in vivo: Following intravenous administration to rats, ebrotidine inhibited histamine- and pentagastrin-stimulated acid secretion in a dose-dependent manner, ED<sub>50</sub> being 0.21 and 0.44 mg/kg, respectively [2]. The mean number of gastric erosions seen at endoscopy after treatment with ebrotidine plus ASA (2.0 +/- 0.3) was significantly lower than that after placebo plus ASA (3.7 +/- 0.2). This reduction in lesion core by ebrotidine was accompanied by a significant increase in gastric blood flow (by 15% in corpus and 26% in antrum), by a rise in transmucosal potential difference (by 12%), and by a decrease of mucosal microbleeding [3]. Results of macroscopic assessment revealed that ebrotidine at doses of 50mg and higher/kg body weight effectively prevented mucosal injury, and that the maximal protective effect was achieved by 1h. Physicochemical analysis established that ebrotidine evoked 30% increase in mucus gel dimension, and showed 20% increase in phospholipids, and the content of sulfo- (18%) and sialomucins (21%) [4].



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