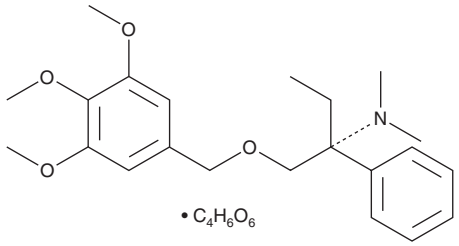
PRODUCT INFORMATION

Fedotozine (tartrate)

Item No. 22189

CAS Registry No.: 133267-27-3
Formal Name: (R)-α-ethyl-N,N-dimethyl-α-[[(3,4,5-trimethoxyphenyl)methoxy]methyl]-benzenemethanamine, [S-(R*,R*)]-2,3-dihydroxybutanedioate
MF: $C_{22}H_{31}NO_4 \bullet C_4H_6O_6$
FW: 523.6
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Fedotozine (tartrate) is supplied as a solid. A stock solution may be made by dissolving the fedotozine (tartrate) in the solvent of choice, which should be purged with an inert gas. Fedotozine (tartrate) is sparingly soluble (1-10 mg/ml) in DMSO.

Fedotozine (tartrate) is slightly soluble (0.1-1 mg/ml) in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Fedotozine is a κ-opioid receptor agonist.[1] It binds to κ-opioid receptors in mouse brain membranes (K_i = 0.16 nM). *In vivo*, fedotozine (10 mg/kg) reduces gastric extension-induced increases in mean arterial pressure (MAP), a marker for hyperalgesia, in a rat model of duodenal acidification-induced gastric hypersensitivity.[2] It also prevents colonic distension-induced inhibition of gastric motility and emptying in dogs when administered at a dose of 50 µg/kg.[3]

References

1. Lai, J., Ma, S.W., Zhu, R.H., *et al.* Pharmacological characterization of the cloned κ opioid receptor as a κ_{1b} subtype. *Neuroreport* **5(16)**, 2161-2164 (1994).
2. Nakata-Fukuda, M., Hirata, T., Keto, Y., *et al.* Inhibitory effect of the selective serotonin 5-HT_3 receptor antagonist ramosetron on duodenal acidification-induced gastric hypersensitivity in rats. *Eur. J. Pharmacol.* **731**, 88-92 (2014).
3. Gué, M., Junien, J.L., and Buéno, L. The κ agonist fedotozine modulates colonic distention-induced inhibition of gastric motility and emptying in dogs. *Gastroenterol.* **107(5)**, 1327-1334 (1994).

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