# **PRODUCT** INFORMATION



Fedotozine (tartrate)

Item No. 22189

CAS Registry No.:	133267-27-3		
Formal Name:	(R)-a-ethyl-N,N-dimethyl-a-[[(3,4,5-	Ì0	
	trimethoxyphenyl)methoxy]methyl]-		<b>N</b> 1
	benzenemethanamine,		
	[S-(R*,R*)]-2,3-dihydroxybutanedioate		N., N.
MF:	$C_{22}H_{31}NO_4 \bullet C_4H_6O_6$		
FW:	523.6	0 ~	Ŭ Ŭ
Purity:	≥95%		• C <sub>4</sub> H <sub>6</sub> O <sub>6</sub>
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 k-opioid receptor agonist.<sup>1</sup> It binds to k-opioid receptors in mouse brain membranes (K; = 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.<sup>2</sup> It also prevents colonic distension-induced inhibition of gastric motility and emptying in dogs when administered at a dose of 50  $\mu$ g/kg.<sup>3</sup>

# References

- 1. Lai, J., Ma, S.W., Zhu, R.H., et al. Pharmacological characterization of the cloned κ opioid receptor as a κ<sub>1b</sub> 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<sub>3</sub> 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).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

## SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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