

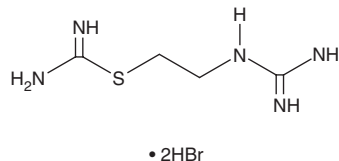
PRODUCT INFORMATION



VUF8430 (hydrobromide)

Item No. 27682

CAS Registry No.: 100130-32-3
Formal Name: carbamimidothioic acid,
2-[(aminoiminomethyl)amino]ethyl ester,
dihydrobromide
MF: C₄H₁₁N₅S • 2HBr
FW: 323.1
Purity: ≥95%
Supplied as: A crystalline 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

VUF8430 (hydrobromide) is supplied as a crystalline solid. A stock solution may be made by dissolving the VUF8430 (hydrobromide) in the solvent of choice, which should be purged with an inert gas. VUF8430 (hydrobromide) is soluble in organic solvents such as DMSO at a concentration of approximately 100 mM. VUF8430 (hydrobromide) is also soluble in water at a concentration of approximately 100 mM.

Description

VUF8430 is a histamine H₄ receptor agonist (K_i = 31.6 nM).¹ It is selective for histamine H₄ over H₁ and H₃ receptors in radioligand binding assays (K_is = >1 and 1 μM, respectively) and is less active in isolated guinea pig atria, which endogenously expresses high levels of H₂ receptors (pD₂ = 3.8). VUF8430 inhibits forskolin-induced, cAMP-mediated increases in β-galactosidase activity (EC₅₀ = 50.1 nM). *In vivo*, VUF8430 (30 mg/kg) enhances HCl-induced formation of gastric lesions in rats.² It also reduces mechanical and thermal allodynia in a mouse model of peripheral neuropathy induced by spared nerve injury (SNI).³

References

1. Lim, H.D., Smits, R.A., Bakker, R.A., *et al.* Discovery of S-(2-guanidylethyl)-isothioureia (VUF 8430) as a potent nonimidazole histamine H₄ receptor agonist. *J. Med. Chem.* **49(23)**, 6650-6651 (2006).
2. Coruzzi, G., Adami, M., Pozzoli, C., *et al.* Selective histamine H₃ and H₄ receptor agonists exert opposite effects against the gastric lesions induced by HCl in the rat stomach. *Eur J. Pharmacol.* **669(1-3)**, 121-127 (2011).
3. Sanna, M.D., Lucarini, L., Durante, M., *et al.* Histamine H₄ receptor agonist-induced relief from painful peripheral neuropathy is mediated by inhibition of spinal neuroinflammation and oxidative stress. *Br. J. Pharmacol.* **174(1)**, 28-40 (2017).

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.

WARRANTY AND LIMITATION OF REMEDY

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