

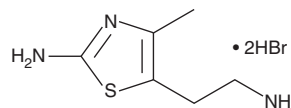
PRODUCT INFORMATION



Amthamine (hydrobromide)

Item No. 29503

CAS Registry No.: 142457-00-9
Formal Name: 2-amino-4-methyl-5-thiazoleethanamine, dihydrobromide
MF: C₆H₁₁N₃S • 2HBr
FW: 319.1
Purity: ≥95%
UV/Vis.: λ_{max}: 264 nm
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

Amthamine (hydrobromide) is supplied as a crystalline solid. A stock solution may be made by dissolving the amthamine (hydrobromide) in water. We do not recommend storing the aqueous solution for more than one day.

Description

Amthamine is a histamine H₂ receptor agonist (pD₂ = 6.21 in isolated guinea pig atria).¹ It is selective for H₂ over H₃ receptors (pD₂ = 4.7 in isolated guinea pig ileum). Amthamine increases heart rate in spontaneously beating isolated guinea pig atria (pD₂ = 6.72) and decreases contractions induced by cholecystokinin (CCK) octapeptide in a dose-dependent manner in isolated guinea pig gallbladder strips.^{2,3} It increases sheep red blood cell-induced production of IgG and IgM antibodies in rabbit serum when administered at a dose of 10 µg/kg twice per day.⁴

References

1. Eriks, J.C., van der Groot, H., Sterk, G.J., *et al.* Histamine H₂-receptor agonists. Synthesis, in vitro pharmacology, and qualitative structure-activity relationships of substituted 4- and 5-(2-aminoethyl) thiazoles. *J. Med. Chem.* **35(17)**, 3239-3246 (1992).
2. Poli, E., Pozzoli, C., Coruzzi, G., *et al.* In vitro cardiac pharmacology of the new histamine H₂-receptor agonist amthamine: Comparisons with histamine and dimaprit. *Agents Actions* **40(1-2)**, 44-49 (1993).
3. Coruzzi, G., Pozzoli, C., Poli, E., *et al.* Effects of histamine H₂ receptor agonists and antagonists on the isolated guinea pig gallbladder. *Fundam. Clin. Pharmacol.* **13(1)**, 84-90 (1999).
4. Tripathi, T., Shahid, M., Khan, H.M., *et al.* Modulation of in vivo immunoglobulin production by endogenous histamine and H1R and H2R agonists and antagonists. *Pharmacol. Rep.* **62(5)**, 917-925 (2010).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/01/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM