

Product Data Sheet

Product Name: 1-Methylhistamine

Cat. No.: GC30697

Chemical Properties

Cas. No. 501-75-7

SMILES NCCCC1=CN(C)C=N1

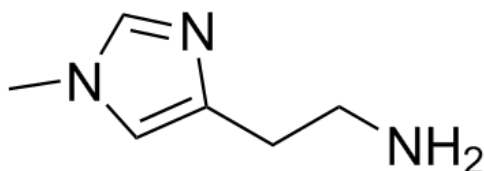
Formula $C_6H_{11}N_3$ M.Wt 125.17

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

1-Methylhistamine is a major metabolite produced by the methylation of histamine catalyzed by histamine N-methyltransferase (HNMT), used to assess the metabolic level of histamine in the body^[1]. As the primary inactivation product of histamine in the central nervous system and peripheral tissues, 1-Methylhistamine concentration (particularly in cerebrospinal fluid and urine) can serve as a biomarker reflecting the activity of the histaminergic nervous system, and is associated with the development and progression of neurological disorders such as Alzheimer's disease and

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narcolepsy^[2]. 1-Methylhistamine also has the potential to be a biomarker for inflammatory diseases, as changes in its levels are associated with conditions such as allergic reactions and mast cell activation syndrome^[3].

References:

- [1] Shan L, Fronczek R, Lammers GJ, et al. The tuberomamillary nucleus in neuropsychiatric disorders. *Handb Clin Neurol*. 2021;180:389-400.
- [2] Gabelle A, Jaussent I, Hirtz C, et al. Cerebrospinal fluid levels of orexin-A and histamine, and sleep profile within the Alzheimer process. *Neurobiol Aging*. 2017 May;53:59-66.
- [3] Hsu WH, Wang SY, Chao YM, et al. Novel metabolic and lipidomic biomarkers of sarcopenia. *J Cachexia Sarcopenia Muscle*. 2024 Oct;15(5):2175-2186.

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