

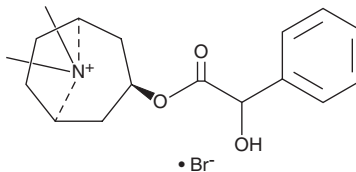
PRODUCT INFORMATION



Methylhomatropine (bromide)

Item No. 23832

CAS Registry No.: 80-49-9
Formal Name: (3-endo)-3-[(2-hydroxy-2-phenylacetyl)oxy]-8,8-dimethyl-8-azoniabicyclo[3.2.1]octane, monobromide
Synonym: NSC 34399
MF: C₁₇H₂₄NO₃ • Br
FW: 370.3
Purity: ≥98%
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

Methylhomatropine (bromide) is supplied as a crystalline solid. A stock solution may be made by dissolving the methylhomatropine (bromide) in the solvent of choice, which should be purged with an inert gas. Methylhomatropine (bromide) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of methylhomatropine (bromide) in these solvents is approximately 20 and 2 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of methylhomatropine (bromide) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of methylhomatropine (bromide) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Methylhomatropine is an anticholinergic agent.¹ It blocks spasm of rat and rabbit intestines induced by acetylcholine (Item No. 23829) *ex vivo* (ED₅₀s = 0.052 and 0.011 mg/kg, respectively). Methylhomatropine slows intestinal transit of a charcoal meal in rats (ED₅₀ = 27 mg/kg) and blocks salivary gland secretion in rabbits (ED₅₀ = 0.16 mg/kg). It also induces mydriasis in mice when administered subcutaneously or orally (ED₅₀s = 0.13 and 12 mg/kg, respectively). Formulations containing methylhomatropine have been used in the treatment of nausea, vomiting, and motion sickness.

Reference

1. Cahen, R.L. and Tvede, K. Homatropine methylbromide; a pharmacological reevaluation. *J. Pharmacol. Exp. Ther.* **105**(2), 166-177 (1952).

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, 12/17/2022

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