

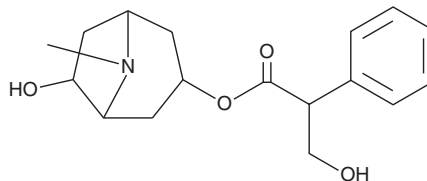
PRODUCT INFORMATION



Anisodamine

Item No. 19650

CAS Registry No.: 17659-49-3
Formal Name: αS-(hydroxymethyl)-benzeneacetic acid, 6-hydroxy-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester
Synonym: 6-hydroxy Hyoscyamine
MF: C₁₇H₂₃NO₄
FW: 305.4
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Anisodamine is supplied as a crystalline solid. A stock solution may be made by dissolving the anisodamine in the solvent of choice. Anisodamine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of anisodamine in ethanol and DMF is approximately 25 mg/ml, and approximately 20 mg/ml in DMSO.

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 anisodamine can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of anisodamine in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Anisodamine is a natural tropane alkaloid shown to be a weak antagonist of α₁-adrenoceptors, blocking WB-4101 and clonidine (Item No. 15949) binding in brain membrane preparations with pK_i values of 2.63 and 1.61, respectively.¹ Anisodamine also has antioxidant effects that may protect against free radical-induced cellular damage.² Anisodamine is predominantly found in the roots of *A. tanguticus*, which is used in traditional Chinese medicine for topical applications.³

References

1. Varma, D.R. and Yue, T.L. Adrenoceptor blocking properties of atropine-like agents anisodamine and anisodine on brain and cardiovascular tissues of rats. *Br. J. Pharmacol.* **87(3)**, 587-594 (1986).
2. Poupko, J.M., Baskin, S.I., and Moore, E. The pharmacological properties of anisodamine. *J. Appl. Toxicol.* **27(2)**, 116-121 (2007).
3. Ma, L., Gu, R., Tang, L., *et al.* Important poisonous plants in tibetan ethnomedicine. *Toxins (Basel)* **7(1)**, 138-155 (2015).

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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