Arecoline bromide

Product Description

Catalog #: AYM126, 500mg  AYM127, 1g
Also available as 10 mM * 1 mL in DMSO

Name: Arecoline bromide

Syn.: Taeniolin
CAS [300-08-3];

MW : 236.11
Purity : >98%

Solubility: DMSO 47 mg/mL; Water 47 mg/mL

Storage: Store at -20°C in a tightly closed container.
Can be stored at RT for short term (M)

Mechanism: Arecoline Hydrobromide is a muscarinic acetylcholine receptor agonist.

Target: mAChR

General information

Biological Activity:

Arecoline is an alkaloid found in the areca nut. Arecoline, a drug obtained from the Areca Catechu L., induced a dose-dependent antinociception (0.3-1 mg kg(-1) i.p.) which was prevented by the muscarinic antagonists pirenzepine (0.1 microg per mouse i.c.v.) and S(-)-ET-126 (0.01 microg per mouse i.c.v.) [1]. Arecoline exerts its excitatory actions by binding to M2-muscarinic receptors on the cell membrane of neurons of the locus coeruleus [2]. Arecoline (1 nM - 1 microM) produced a concentration-dependent contraction in both the longitudinal and the circular smooth muscle of rabbit colon. Atropine (10 microM) abolished the arecoline (80 nM)--induced contraction. M3 receptor antagonist, 4-DAMP (0.4 microM), abolished the arecoline (80 nM)--related response, whereas M2 receptor antagonist, gallamine (0.4 microM), did not affect the effect of arecoline. These results suggest that arecoline excites the colonic motility via M3 receptor in rabbits [3].

References:


Preparing Stock Solutions

Volume of DMSO:

<table>
<thead>
<tr>
<th>concentration</th>
<th>mass 1 mg</th>
<th>mass 5 mg</th>
<th>mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>mM</td>
<td>4.2353 mL</td>
<td>21.1766 mL</td>
<td>42.3531 mL</td>
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<tr>
<td>5 mM</td>
<td>0.8471 mL</td>
<td>4.2353 mL</td>
<td>8.4706 mL</td>
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<tr>
<td>10 mM</td>
<td>0.4235 mL</td>
<td>2.1177 mL</td>
<td>4.2353 mL</td>
</tr>
</tbody>
</table>
Related mAChR Products

(R)-5-Hydroxymethyl Tolterodine (PNU-200577; Desfesoterodine)
a potent and selective muscarinic receptor antagonist with a Kb and a pA2 of 0.84 nM and 9.14, respectively.

Acetylcholine chloride
a neurotransmitter that can induce the opening of calcium channels.

Aclidinium Bromide (LAS 34273; LAS-W 330)
a long-acting, inhaled muscarinic antagonist as a maintenance treatment for chronic obstructive pulmonary disease (COPD).

Anisodamine
an anticholinergic and (alpha)1-adrenergic receptor antagonist used in the treatment of acute circulatory shock, is also a naturally occurring tropane alkaloid found in some plants of the Solanaceae family.

Benztimide hydrochloride
a muscarinic acetylcholine receptor antagonist.

Benztropine mesylate
a centrally-acting, antimuscarinic agent used as an adjunct in the treatment of Parkinson(acute)s disease.

Camylofin
Camylofin is an antimuscarinic, is a smooth muscle relaxant.

Carbamoylcholine chloride
used to study responses mediated by nAChR and mAChR, including smooth muscle contraction, gut motility, and neuronal signaling.

Clidinium bromide
an anticholinergic (specifically a muscarinic antagonist) drug, may help symptoms of cramping and abdominal/stomach pain by decreasing stomach acid, and slowing the intestines.

Diphenidol hydrochloride
a muscarinic antagonist employed as an antiemetic and as an antivertigo agent.

Ordering information

Catalog size quantities and prices may be found at http://www.interchim.com.
Please inquire for higher quantities (availability, shipment conditions).

Please contact InterBioTech – Interchim for any other information
Hotline : +33(0)4 70 03 73 06 – Interbiotech@interchim.com

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