

# Pyridostigmine (bromide)

Catalog No: tcsc2148



## Available Sizes

Size: 1g

Size: 5g



## Specifications

**CAS No:**

101-26-8

**Formula:**

$C_9H_{13}BrN_2O_2$

**Pathway:**

Neuronal Signaling

**Target:**

AChE

**Purity / Grade:**

>98%

**Solubility:**

H<sub>2</sub>O : 8.8 mg/mL (33.70 mM; Need ultrasonic and warming)

**Observed Molecular Weight:**

261.12

## Product Description

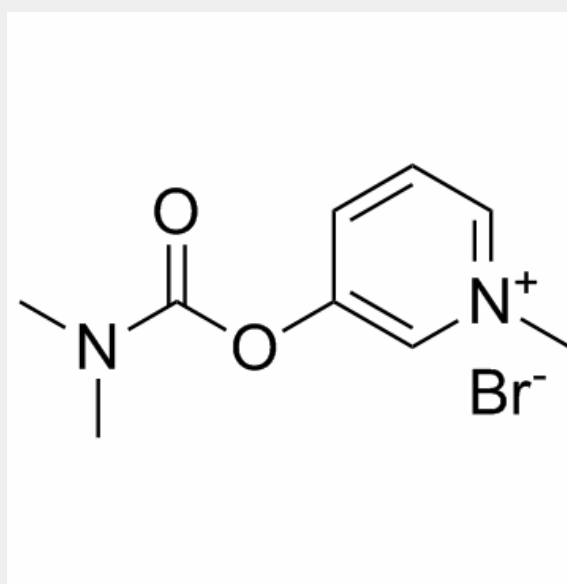
Pyridostigmine is a parasympathomimetic and a reversible cholinesterase inhibitor.

Target: AChE

Pyridostigmine is a parasympathomimetic and a reversible cholinesterase inhibitor. Since it is a quaternary amine, it is poorly absorbed in the gut and does not cross the blood-brain barrier, except possibly in stressful conditions. Pyridostigmine inhibits

acetylcholinesterase in the synaptic cleft, thus slowing down the hydrolysis of acetylcholine. It is a quaternary carbamate inhibitor of cholinesterase that does not cross the blood-brain barrier which carbamylates about 30% of peripheral cholinesterase enzyme. The carbamylated enzyme eventually regenerates by natural hydrolysis and excess ACh levels revert to normal.

Pyridostigmine is used to treat muscle weakness in people with myasthenia gravis and to combat the effects of curariform drug toxicity. Pyridostigmine bromide has been FDA approved for military use during combat situations as an agent to be given prior to exposure to the nerve agent Soman in order to increase survival. Used in particular during the first Gulf War, pyridostigmine bromide has been implicated as a causal factor in Gulf War syndrome. Pyridostigmine sometimes is used to treat orthostatic hypotension. It may also be of benefit in chronic axonal polyneuropathy.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!