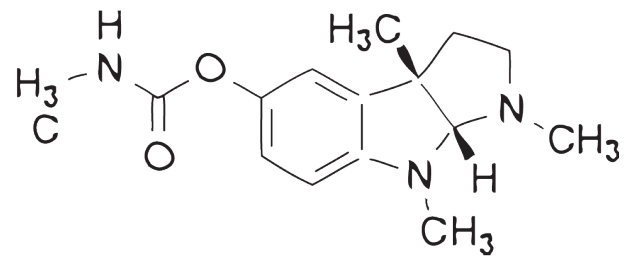


Physostigmine (Eserine)



## BIOLOGY

Stimulation of the Medial Perforant Path (coming from entorhinal cortex) triggers fEPSP that can be recorded in the Dentate Gyrus-CA3 region of the hippocampus. A paired-pulse protocol allows to distinguish between Lateral Perforant Path (LPP) and Medial Perforant Path (MPP) selective stimulation. Potentiation versus inhibition of the second response triggered by the paired-pulse is observed when stimulating LPP or MPP, respectively. Physostigmine, a selective acetylcholinesterase inhibitor depresses fEPSPs evoked by stimulation of MPP fibres, revealing a cholinergic-dependent modulation of MPP-Dentate Gyrus synapses.

## PATHOLOGIES ASSOCIATED WITH CHOLINERGIC TRANSMISSION

Alzheimer's Disease  
Dementia  
Cognitive Dysfunctions  
Attention Deficit Disorders

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