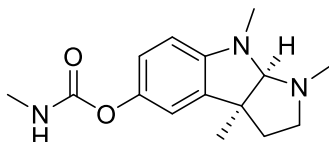


Eserine

Code No.: **BIA-E2379**

Pack sizes: **5 mg, 25 mg**



Synonyms : (-)-Eserine, (-)-Physostigmine, Cogmine, Esromiotin, MCV 4484, NIH 10421, NSC 30782, Physostol

Specifications

CAS #	: 57-47-6
Molecular Formula	: C₁₅H₂₁N₃O₂
Molecular Weight	: 275.35
Source	: Synthetic
Appearance	: White to off-white solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Eserine (physostigmine) was isolated from the Calabar bean in 1878 and its structure first elucidated in 1925 and subsequently revised in 1973. Eserine inhibits acetylcholinesterase, indirectly stimulating both nicotinic and muscarinic receptors due to the consequential increase in available acetylcholine at the synapse. Eserine acts allosterically as a noncompetitive sensitizer of acetylcholine in the rat heart.

References

1. Cholinesterase inhibitors: Structure of eserine. Petcher T.J. & Pauling P. Nature 1973, 241, 277.
2. The mechanism of action of physostigmine at muscarinic receptors of rat myocardium. Orsetti M. Bollettino - Societa Italiana di Biologia Sperimentale 1986, 62, 67.
3. PET imaging of acetylcholinesterase inhibitor-induced effects on α 4 β 2 nicotinic acetylcholine receptor binding. Hillmer A.T. et al. Synapse 2013, 67, 882.