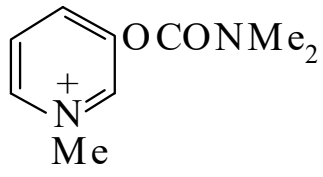
>>**Entry Name: Pyridostigmine(1+)**
Synonym(s): 3-[[(Dimethylamino)carbonyl]oxy]-1-methylpyridinium, 9CI. 3-Hydroxy-1-methylpyridinium dimethylcarbamate, 8CI



CAS Registry Number: 155-97-5

Molecular Formula: $C_9H_{13}N_2O_2^{(+)}$
Molecular Weight: 181.214
Accurate Mass: 181.097703
Percentage Composition: C 59.65%; H 7.23%; N 15.46%; O 17.66%

>>**Derivative:** Bromide
Synonym(s): Pyridostigmine bromide, BAN, INN, JAN, USAN**.** Kalymin. Mestinon. Regonol. Ro 1-5130

CAS Registry Number: 101-26-8

Molecular Formula: $C_9H_{13}BrN_2O_2$
Molecular Weight: 261.118
Accurate Mass: 260.036039
Percentage Composition: C 41.40%; H 5.02%; Br 30.60%; N 10.73%; O 12.25%
Use/Importance: Cholinergic agent. Prophylactic for military nerve agent poisoning. Used in treatment of myasthenia gravis
Physical Description: Hygroscopic cryst. (EtOH)
Melting Point: Mp 152-154°
Solubility: Sol. H_2O
Hazard & Toxicity: Potential contact sensitiser. LD_{50} (rat, orl) 37.5 mg/kg. Has been implicated in synergistic neurotoxicity (Gulf War Syndrome)

Sigma: P9797

References:

Swiss Pat., 1947, 246 834; *CA*, **43**, 5050, *(synth)*
Millner, E.O. *et al.*, *J. Med. Chem.*, 1974, **17**, 13, *(synth, pharmacol)*
Breyer-Pfaff, U. *et al.*, *Clin. Pharmacol. Ther. (St. Louis)*, 1985, **37**, 495, *(pharmacol)*
Inns, R.H. *et al.*, *Clinical and Experimental Toxicology of Organophosphates and Carbamates*, (eds. Ballantyne, B., *et al*) Butterworth-Heinemann,Oxford, 1992, 602, *(use)*
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, 1993, 1120
Lewis, R.J.*, Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold*, 1992, MDL600; PPI800