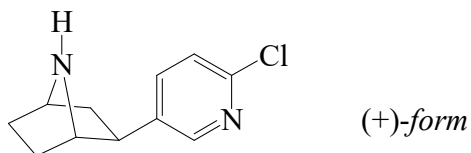




>>Entry Name: Epibatidine

Synonym(s): 2-(6-Chloro-3-pyridinyl)-7-azabicyclo[2.2.1]heptane, 9Cl



Type of Compound Code(s): XA0650

Molecular Formula: $C_{11}H_{13}ClN_2$

Molecular Weight: 208.69

Accurate Mass: 208.076725

Percentage Composition: C 63.31%; H 6.28%; Cl 16.99%; N 13.42%

General Statement: Unique new class of alkaloids

Calculated Log P Data: Log P 1.02 (calc)

UV: [neutral] $\lambda_{\max}$ 217 (ϵ); 270 (sh) (ϵ); 274 (ϵ 5300) (MeOH) (Derep) [acid] $\lambda_{\max}$ (solvent not reported) (Derep)

>>Variant: (+)-form

CAS Registry Number: 140111-52-0

Type of Compound Code(s): VX1040 XA3140

Molecular Formula: $C_{11}H_{13}ClN_2$

Molecular Weight: 208.69

Accurate Mass: 208.076725

Percentage Composition: C 63.31%; H 6.28%; Cl 16.99%; N 13.42%

Biological Source: Alkaloid from the skin extracts of the Ecuadoran poison frog *Epipedobates tricolor*

Biological Use/Importance: Neuronal nicotinic acetylcholine receptor agonist (most potent known to date). Also active at neuromuscular nicotinic receptors. Potent non-opioid analgesic (potency reported to be 200-500 times greater than that of morphine)

Melting Point: Mp 56-57°

Optical Rotation: $[\alpha]_D^{23} +5$ (c, 0.35 in $CHCl_3$)

Other Data: Data refer to synthetic material

>>Derivative: Hydrochloride

Melting Point: Mp 150 dec.°

Optical Rotation: $[\alpha]_D^{24} +34.7$ (c, 0.36 in MeOH)

>>Variant: (–)-form

CAS Registry Number: 152378-30-8

Molecular Formula: $C_{11}H_{13}ClN_2$

Molecular Weight: 208.69

Accurate Mass: 208.076725

Percentage Composition: C 63.31%; H 6.28%; Cl 16.99%; N 13.42%

Physical Description: Needles

Melting Point: Mp 56-57°. Mp 64°

Optical Rotation: $[\alpha]_D^{23} -5$ (c, 0.35 in $CHCl_3$)

Other Data: Similar pharmacol. profile to (+)-form

>>Derivative: Hydrochloride

Melting Point: Mp 130 dec.°

Optical Rotation: $[\alpha]_D^{24} -33.7$ (c, 0.16 in MeOH)

>>Variant: (±)-form

CAS Registry Number: 148152-66-3

Molecular Formula: $C_{11}H_{13}ClN_2$

Molecular Weight: 208.69

Accurate Mass: 208.076725

Percentage Composition: C 63.31%; H 6.28%; Cl 16.99%; N 13.42%

Source/Synthesis: Synthetic

Melting Point: Mp 50-51°