

Product Name : Protriptyline hydrochloride

Synonyms : —

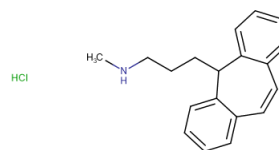
Cat No. : M10865

CAS Number : 1225-55-4

Molecular Formula : C₁₉H₂₁N·HCl

Formula Weight : 299.84

Chemical Name : —



Description : Protriptyline hydrochloride is a dibenzocycloheptene-derivative tricyclic antidepressant (TCA). TCAs are structurally similar to phenothiazines. They contain a tricyclic ring system with an alkyl amine substituent on the central ring. In non-depressed individuals, protriptyline does not affect mood or arousal, but may cause sedation. In depressed individuals, protriptyline exerts a positive effect on mood. TCAs are potent inhibitors of serotonin and norepinephrine reuptake. In addition, TCAs down-regulate cerebral cortical β -adrenergic receptors and sensitize post-synaptic serotonergic receptors with chronic use. The antidepressant effects of TCAs are thought to be due to an overall increase in serotonergic neurotransmission. TCAs also block histamine H₁ receptors, α ₁-adrenergic receptors and muscarinic receptors, which accounts for their sedative, hypotensive and anticholinergic effects (e.g. blurred vision, dry mouth, constipation, urinary retention), respectively. See toxicity section below for a complete listing of side effects. Protriptyline may be used for the treatment of depression.

Pathway : Endocrinology/Hormones

Target : 5-HT Receptor

Receptor : Sert (Sodium-dependent)

Solubility : Soluble in DMSO

SMILES : Cl.CNCCCC1C2=CC=CC=C2C=CC2=CC=CC=C12

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1.McDougle CJ, et al. Mol Psychiatry. 1998 May;3(3):270-3.