Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Lamotrigine

Catalog No: tcsc2616

Available Sizes

Size: 1g

Size: 5g

Specifications

CAS No:
84057-84-1

Formula:
$C_9H_7Cl_2N_5$

Pathway:
Autophagy;Membrane Transporter/Ion Channel

Target:
Autophagy;Sodium Channel

Purity / Grade:
>98%

Solubility:
H2O :

Alternative Names:
LTG;BW430C

Observed Molecular Weight:
256.09

Product Description

Lamotrigine(BW430C) is a novel anticonvulsant drug for inhibition of 5-HT and sodium channel

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Target: Sodium Channel

Lamotrigine stabilises presynaptic neuronal membranes by blockade of voltage-dependent sodium channels, thus preventing the release of excitatory neurotransmitters, particularly glutamate and aspartate [1]. In rat cerebral cortex tissue incubated with veratrine 10 mg/L, lamotrigine is twice as potent in inhibiting the release of glutamate and aspartate (ED 50 = 5.38 mg/L for each) than the release of GABA (ED50 = 11.2 mg/L), and is much less potent in inhibiting acetylcholine release (ED50 = 25.6 mg/L) when cortical slices is exposed to veratrine 75 mg/L. Basal glutamate release is unaffected [2]. Lamotrigine inhibits high-frequency sustained repetitive firing of sodium-dependent action potentials, indicating a direct effect on voltage-activated sodium channels [3]. Lamotrigine (Lamictal), a phenyltriazine derivative, is a well established anticonvulsant agent that has shown efficacy in the prevention of mood episodes in adult patients with bipolar I disorder. lamotrigine significantly delayed time to intervention for a depressive episode and showed limited efficacy in delaying time to intervention for a manic/hypomanic episode, compared with placebo. Lamotrigine is generally well tolerated [4].