

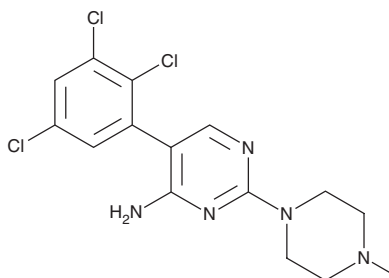
# PRODUCT INFORMATION



## Sipatrigine

Item No. 32963

**CAS Registry No.:** 130800-90-7  
**Formal Name:** 2-(4-methyl-1-piperazinyl)-5-(2,3,5-trichlorophenyl)-4-pyrimidinamine  
**Synonym:** BW 619C89  
**MF:** C<sub>15</sub>H<sub>16</sub>Cl<sub>3</sub>N<sub>5</sub>  
**FW:** 372.7  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Sipatrigine is supplied as a crystalline solid. A stock solution may be made by dissolving the sipatrigine in the solvent of choice, which should be purged with an inert gas. Sipatrigine is soluble in the organic solvent DMSO at a concentration of approximately 10 mM.

### Description

Sipatrigine is a neuroprotective agent and derivative of lamotrigine (Item No. 15428).<sup>1</sup> It inhibits neuronal voltage-gated sodium and calcium channels in a voltage-dependent manner. Sipatrigine reduces the neuronal firing frequency and decreases the amplitude of excitatory post-synaptic potentials (EPSPs) in electrically stimulated rat corticostriatal slices ( $EC_{50}$ s = 4.5 and 2  $\mu$ M, respectively).<sup>2</sup> It inhibits veratrine-induced glutamate and aspartate release in rat cerebral cortex slices ( $IC_{50}$ s = ~5  $\mu$ M for both).<sup>3</sup> Sipatrigine (30 mg/kg, i.v.) reduces infarct volume in a rat model of focal ischemia induced by middle cerebral artery occlusion (MCAO).<sup>4</sup>

### References

1. Hainsworth, A.H., Stefani, A., Calabresi, P., *et al.* Sipatrigine (BW 619C89) is a neuroprotective agent and a sodium channel and calcium channel inhibitor. *CNS Drug Rev.* **6(2)**, 111-134 (2000).
2. Calabresi, P., Stefani, A., Marfia, G.A., *et al.* Electrophysiology of sipatrigine: A lamotrigine derivative exhibiting neuroprotective effects. *Exp. Neurol.* **162(1)**, 171-179 (2000).
3. Leach, M.J., Swan, J.H., Eisenthal, D., *et al.* BW619C89, a glutamate release inhibitor, protects against focal cerebral ischemic damage. *Stroke* **24(7)**, 1063-1067 (1993).
4. Graham, S.H., Chen, J., Lan, J., *et al.* Neuroprotective effects of a use-dependent blocker of voltage-dependent sodium channels, BW619C89, in rat middle cerebral artery occlusion. *J. Pharmacol. Exp. Ther.* **269(2)**, 854-859 (1994).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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