

Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com



DATASHEET

Lamotrigine

Product overview

| | |
|--------------------------|---|
| Name | Lamotrigine |
| Cat No | HB0368 |
| Biological action | Inhibitor |
| Purity | >99% |
| Description | Na ²⁺ / K ⁺ / Ca ²⁺ channel inhibitor. Anticonvulsant. |

Images



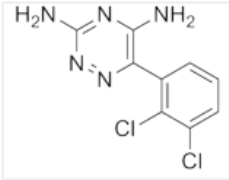
Biological Data

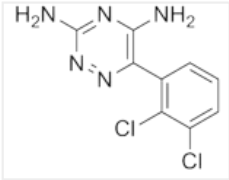
| | |
|-------------------------------|--|
| Biological description | Anticonvulsant. Inhibits voltage-dependent Na ²⁺ channels, K ⁺ and Ca ²⁺ channels. Inhibits α 4 β 2-nACh receptor mediated currents and reduces GABA _A receptor transmission. Inhibits 5-HT, noradrenaline and dopamine uptake into synaptosomes (IC ₅₀ values are 474, 239 and 322 μ M respectively). Shows anticonvulsant and anti-bipolar actions. Blood-brain barrier permeable. |
|-------------------------------|--|

Solubility & Handling

| | |
|-----------------------------|---|
| Storage instructions | Room temperature |
| Solubility overview | Soluble in ethanol (10mM) or DMSO (100mM) |
| Important | This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use. |

Chemical Data

| | |
|---------------------------|---|
| Chemical name | 6-(2,3-Dichlorophenyl)-1,2,4-triazine-3,5-diamine |
| Molecular Weight | 256.09 |
| Chemical structure |  |



| | |
|--------------------------|--|
| Molecular Formula | C ₉ H ₇ Cl ₂ N ₅ |
|--------------------------|--|

| | |
|--------------------|---|
| CAS Number | 84057-84-1 |
| PubChem identifier | 3878 |
| SMILES | <chem>NC1=NC(N)=C(N=N1)C1=CC=CC(Cl)=C1Cl</chem> |
| InChIKey | PYZRQGJRPPTADH-UHFFFAOYSA-N |

References

Modulation of calcium and potassium currents by lamotrigine.

Grunze H *et al* (1998) *Neuropsychobiology* 38(3)

PubMedID [9778600](#)

Lamotrigine reduces spontaneous and evoked GABAA receptor-mediated synaptic transmission in the basolateral amygdala: implications for its effects in seizure and affective disorders.

Braga MF *et al* (2002) *Neuropharmacology* 42(4)

PubMedID [11955522](#)

Lamotrigine inhibits monoamine uptake in vitro and modulates 5-hydroxytryptamine uptake in rats.

Southam E *et al* (1998) *Eur J Pharmacol* 358(1)

PubMedID [9809864](#)

The anticonvulsive drug lamotrigine blocks neuronal $\alpha_4\beta_2$ nicotinic acetylcholine receptors.

Zheng C *et al* (2010) *J Pharmacol Exp Ther* 335(2)

PubMedID [20688974](#)
