



# LKT Laboratories, Inc.

## Lomerizine Dihydrochloride

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### Product Information

**Product ID** L5751

**CAS No.** 101477-54-7

**Chemical Name** 1-[Bis(4-fluorophenyl)methyl]-4-[(2,3,4-trimethoxyphenyl)methyl] piperazine dihydrochloride

**Synonym** Lomerizine dihydrochloride

**Formula** C<sub>27</sub>H<sub>30</sub>F<sub>2</sub>N<sub>2</sub>O<sub>3</sub> • 2HCl

**Formula Wt.** 541.47

**Melting Point** 204-207° C

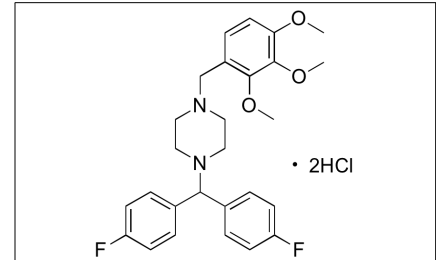
**Purity** ≥98%

**Solubility**

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Lomerizine is an inhibitor of voltage-gated L-type and T-type Ca<sup>2+</sup> channels as well as transient receptor potential (TRP5) channels. Lomerizine is clinically used to treat migraine and vertigo. Lomerizine exhibits neuroprotective benefit in animal models of amyotrophic lateral sclerosis (ALS), decreasing glutamate excitotoxicity, Ca<sup>2+</sup> overload, and mitochondrial dysfunction. In other animal models, lomerizine protects against NMDA-induced retinal damage and neurodegeneration.



**Bulk quantities available upon request**

Product ID	Size
L5751	100 mg
L5751	500 mg
L5751	1 g
L5751	5 g

**References** Tran LT, Gentil BJ, Sullivan KE, et al. The voltage-gated calcium channel blocker lomerizine is neuroprotective in motor neurons expressing mutant SOD1, but not TDP-43. *J Neurochem.* 2014 Apr 9. [Epub ahead of print]. PMID: 24716897.

Inoue Y, Yabe T. Lomerizine therapy for the treatment of benign paroxysmal vertigo of childhood transitioning into atypical basilar migraine: A case report. *Exp Ther Med.* 2013 Jun;5(6):1573-1575. PMID: 23837033.

Ito Y, Nakamura S, Tanaka H, et al. Lomerizine, a Ca<sup>2+</sup> channel blocker, protects against neuronal degeneration within the visual center of the brain after retinal damage in mice. *CNS Neurosci Ther.* 2010 Apr;16(2):103-14. PMID: 19788586.

Fitzgerald M, Bartlett CA, Harvey AR, Dunlop SA. Early events of secondary degeneration after partial optic nerve transection: an immunohistochemical study. *J Neurotrauma.* 2010 Feb;27(2):439-452. PMID: 19852581.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.