LKT Laboratories, Inc.

Ligustrazine Hydrochloride

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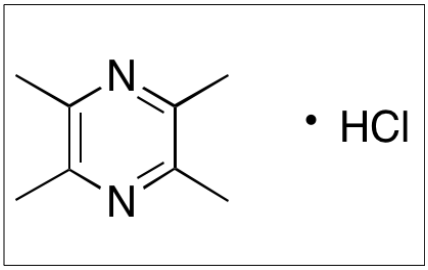
Product Information

Product ID L3326
CAS No. 76494-51-4
Chemical Name

Synonym Tetramethylpyrazine Hydrochloride, Ligustrazine HCl



Formula $C_8H_{12}N_2 \cdot HCl$
Formula Wt. 172.66
Melting Point
Purity ≥98%
Solubility 34mg/mL in DMSO

Bulk quanitites available upon request

Product ID	Size
L3326	250 mg
L3326	1 g
L3326	5 g
L3326	25 g

Store Temp Ambient
Ship Temp Ambient

Description Ligustrazine is also known as tetramethylpyrazine. Tetramethylpyrazine is a dihydropyrazine found in Ligusticum walliichi that exhibits neuromodulatory, antioxidative, cognition enhancing, nephroprotective, antifibrotic, anti-inflammatory, and anticancer chemotherapeutic activities. This compound also inhibits PDE10A2 and acts as an antagonist at adenosine 2A and 2B receptors. In vitro, tetramethylpyrazine promotes neural progenitor cell migration and increases PI3K, PKC, and ERK signaling. Tetramethylpyrazine also induces neuroblastoma differentiation by targeting Topoisomerase Iiß (topoIIß). In animal models of chronic alcoholic encephalopathy, Tetramethylpyrazine improves learning and memory. Additionally, this compound inhibits arsenic-induced production of ROS and prevents apoptosis and mitochondrial dysfunction in kidney cells. Tetramethylpyrazine also ameliorates oxidative injury induced by methotrexate. In vitro, this compound inhibits proliferation of hepatic stellate cells. In animal models of hepatocellular carcinoma, tetramethylpyrazine inhibits tumor development and growth and induces cell cycle arrest and apoptosis.

References

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