Levamisole (hydrochloride)

Item No. 14874

CAS Registry No.: 16595-80-5
Formal Name: (6S)-2,3,5,6-tetrahydro-6-phenyl-imidazo[2,1-b]thiazole, monohydrochloride
Synonyms: NSC 177023, R 12654, L-T etramisole
MF: C_{11}H_{12}N_{2}S • HCl
FW: 240.8
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: \( \lambda_{\text{max}} \) 215 nm

Laboratory Procedures
For long term storage, we suggest that levamisole (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

Levamisole (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the levamisole (hydrochloride) in the solvent of choice. Levamisole (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of levamisole (hydrochloride) in these solvents is approximately 11, 3, and 0.1 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of levamisole (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of levamisole (hydrochloride) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Levamisole is a water-soluble imidazothiazole derivative with anti-helminthic actions.\(^1\) It selectively activates nematode acetylcholine receptor ion channels in nerve and muscle (EC_{50} = 6 \mu M).\(^2\) In higher animals, levamisole inhibits tissue amebicidal activity at the time of delivery.\(^3\) Levamisole is used as a cocaine adulterant, which can result in cutaneous vasculitis with neutropenia or leukopenia.\(^6\)

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/14874

**WARNING:** This product is for laboratory research only; not for administration to humans, not for human or veterinary diagnostic or therapeutic use.

**SAFETY DATA**
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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