**Catalog Numbers:** LS-H55-1, LS-H55-5, LS-H55-10, LS-H55-25  
**Product Name:** Thioperamide (maleate)  
**Description:** Thioperamide (maleate) is a selective histamine H3 receptor antagonist that crosses the blood-brain barrier. This compound binds to rat cerebral cortical cells in vitro with a pKi value of 8.4 and inhibits histamine binding in vivo with an ED50 value of 1 mg/kg. At a dose of 5 mg/kg thioperamide (maleate) inhibits kindled seizures in rats by decreasing histamine and gamma-aminobutyric acid.  
**Formal Name:** N-cyclohexyl-4-(1H-imidazol-5-yl)-1-piperidinecarbothioamide, 2Z-butenedioate  
**Synonyms:**  
**Classification:** biochemical, chemical, antagonist  
**CAS Number:** 148440-81-7  
**Molecular Formula:** C15H24N4S • C4H4O4  
**Formula Weight:** 408.5  
**Purity:** ≥98%  
**Formulation:** A crystalline solid  
**λmax:** 249 nm  
**SMILES:** S=C(NC1CCCC1)N(CC2)CCC2C3=CN3.O=C/C=C(C\(\text{O}\)=O)O  
**InChl Code:** InChI=1S/C15H24N4S.C4H4O4/c20-15(18-13-4-2-1-3-5-13)19-8-6-12(7-9-19)14-10-16-11-17-14;5-3(6)1-2-4(7)8/h10-13H,1-9H2,(H,16,17){H,18,20};1-2H,(H,5,6){H,7,8}/b;2-1-  
**InChl Key:** WUYMIKDRCYGY-BTJKTAKUSA-N  
**Conditions:** Shipped Ambient, store at -20°C, ≥ 2 years shelf life.  
**Usage:** Thioperamide (maleate) is supplied as a crystalline solid. A stock solution may be made by dissolving the thioperamide (maleate) in an organic solvent purged with an inert gas. Thioperamide (maleate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of thioperamide (maleate) in these solvents is approximately 10, 25, and 30 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 thioperamide (maleate) can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of thioperamide (maleate) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.  
**Restrictions:** This product is for research use only. Not for administration to humans, or for human or veterinary diagnostic or therapeutic use.
References:


Technical Support: Technical.Support@LSBio.com