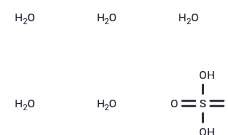


(-)-Sparteine sulfate pentahydrate

Chemical Properties

CAS No. : 6160-12-9
 Formula: C₁₅H₃₈N₂O₉S
 Molecular Weight: 422.54
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



Biological Description

| | |
|---------------|---|
| Description | (-)-Sparteine sulfate pentahydrate ((-)-Sparteine Sulfate) is a class 1a antiarrhythmic agent and sodium channel blocker capable of chelating bivalent calcium and magnesium. |
| Targets(IC50) | Sodium Channel |

Solubility Information

| | |
|---------------------|--|
| Solubility | DMSO: 45 mg/mL (106.5 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.73 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i> |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 2.3666 mL | 11.8332 mL | 23.6664 mL |
| 5 mM | 0.4733 mL | 2.3666 mL | 4.7333 mL |
| 10 mM | 0.2367 mL | 1.1833 mL | 2.3666 mL |
| 50 mM | 0.0473 mL | 0.2367 mL | 0.4733 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Preissner S, et al. Nucleic Acids Res. 2010 Jan; 38(Database issue):D237-43.

Engel A M, Klevenhusen F, Moening J L, et al. Investigations on the Transfer of Quinolizidine Alkaloids from Lupinus angustifolius into the Milk of Dairy Cows. Journal of Agricultural and Food Chemistry. 2022

Gawali VS, et al. C2-Modified Sparteine Derivatives Are a New Class of Potentially Long-Acting Sodium Channel Blockers. ChemMedChem. 2017 Nov 22;12(22):1819-1822.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481