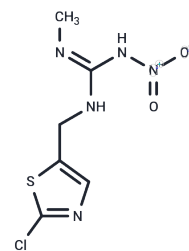


Clothianidin

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 210880-92-5 |
| Formula: | C ₆ H ₈ ClN ₅ O ₂ S |
| Molecular Weight: | 249.68 |
| 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 | Clothianidin (TI 435), an insecticide, acts as an agonist of acetylcholine to stimulate nAChR, thereby activating post-synaptic acetylcholine receptors but not inhibiting AChE. |
| Targets(IC50) | Others,AChR |

Solubility Information

| | |
|---------------------|---|
| Solubility | DMSO: 125 mg/mL (500.64 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+90% Saline: < 10 mg/mL (40.05 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (40.05 mM),Suspension. <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 | 4.0051 mL | 20.0256 mL | 40.0513 mL |
| 5 mM | 0.801 mL | 4.0051 mL | 8.0103 mL |
| 10 mM | 0.4005 mL | 2.0026 mL | 4.0051 mL |
| 50 mM | 0.0801 mL | 0.4005 mL | 0.801 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

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Harry-Asobara JL, Kamei I. Indirect bacterial effect enhanced less recovery of neonicotinoids by improved activities of white-rot fungus *Phlebia brevispora*. *J Microbiol Biotechnol.* 2019 Mar 28.

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