

Pyriproxyfen

Chemical Properties

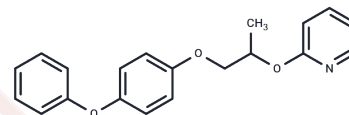
CAS No. : 95737-68-1

Formula: C₂₀H₁₉NO₃

Molecular Weight: 321.37

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	Pyriproxyfen (S-31183) is an insecticide that acts as a biomimetic of juvenile hormone.
Targets(IC50)	Others,Parasite,Autophagy
In vivo	Zebrafish male adults were acutely exposed to 0.001, 0.01 and 0.1 µg/mL pyriproxyfen for 16 h. Mitochondrial respiration of brain tissues was assessed. ROS generation was estimated using H2DCF-DA and MitoSOX. Calcium transport was monitored by Calcium Green 5 N. NO synthesis activity was estimated using DAF-FM-DA. Brain acetylcholinesterase showed an in vivo IC ₂₀ of 0.30 µmol/L pyriproxyfen, and an IC ₅₀ of 92.5 µmol/L. The inhibitory effect on zbAChE activity was competitive-like. Respiratory control of Complex I/II decreased significantly after insecticide exposure. The MitoSOX test showed that O ₂ - generation had a pyriproxyfen dose-dependent effect. Brain tissue lost 50% of Ca ²⁺ uptake capacity at 0.1 µg/mL pyriproxyfen. Ca ²⁺ release showed a clear mitochondrial impairment at lower pyriproxyfen exposures[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (155.58 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 (6.22 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	3.1117 mL	15.5584 mL	31.1168 mL
5 mM	0.6223 mL	3.1117 mL	6.2234 mL
10 mM	0.3112 mL	1.5558 mL	3.1117 mL
50 mM	0.0622 mL	0.3112 mL	0.6223 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.

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