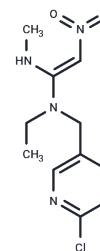


## Nitenpyram

## Chemical Properties

|                   |   |
|-------------------|---|
| CAS No. :         | 150824-47-8   |
| Formula:          | C <sub>11</sub> H <sub>15</sub> ClN <sub>4</sub> O <sub>2</sub>   |
| Molecular Weight: | 270.72  |
| Storage:          | Powder: -20°C for 3 years   In solvent: -80°C for 1 year<br>Actual storage temperature shall be subject to the COA. |



## Biological Description

|               |  |
|---------------|--|
| Description   | Nitenpyram (Capstar) is a nicotinic acetylcholine receptor (AChR) agonist, used as veterinary medicine to treat parasites of livestock and pets. |
| Targets(IC50) | AChR,Parasite  |

## Solubility Information

|                     |  |
|---------------------|--|
| Solubility          | DMSO: 70 mg/mL (258.57 mM),Sonication is recommended.<br>H <sub>2</sub> O: 50 mg/mL (184.69 mM),Sonication is recommended.<br>( $< 1$ 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 (7.39 mM),Sonication is recommended.<br><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  | 3.6939 mL | 18.4693 mL | 36.9385 mL |
| 5 mM  | 0.7388 mL | 3.6939 mL  | 7.3877 mL  |
| 10 mM | 0.3694 mL | 1.8469 mL  | 3.6939 mL  |
| 50 mM | 0.0739 mL | 0.3694 mL  | 0.7388 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

Yan S, Wang J, Zhu L, Chen A, Wang J. *Ecotoxicol Environ Saf.* 2015 Dec;122:54-60.  
Ueyama J, et al. *Environ Sci Technol.* 2015 Dec 15;49(24):14522-8.

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