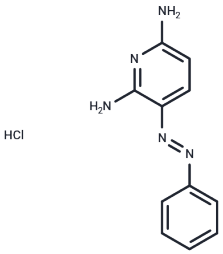
Data Sheet (Cat.No.T1386)

TargetMol

Phenazopyridine hydrochloride

Chemical Properties



CAS No. : 136-40-3

Formula: C11H12ClN5

Molecular Weight: 249.7

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	Phenazopyridine hydrochloride (Pyridium) is used orally as a urinary tract analgesic. Side effects of phenazopyridine hydrochloride administration can include nausea, interference with the oxygen-carrying capacity of red blood cells (methemoglobinemia), hemolytic anemia as well as renal and hepatic toxicity. It is reasonably anticipated to be a human carcinogen.
Targets(IC50)	Sodium Channel,TRP/TRPV Channel
In vitro	Phenazopyridine directly inhibits the mechanical sensitivity of Aδ-fibers in the bladders of normal rats.
In vivo	Phenazopyridine enhances cell viability, strengthens neuronal cell differentiation, synchronizes the state of cell differentiation, and reduces the number of non-neuronal and undifferentiated cells.

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 10 mg/mL (40.05 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: 1 mg/mL (4 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0048 mL	20.024 mL	40.0481 mL
5 mM	0.801 mL	4.0048 mL	8.0096 mL
10 mM	0.4005 mL	2.0024 mL	4.0048 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

Suter DM, et al. J Cell Mol Med, 2009, 13(9B), 3517-3527
Aizawa N, et al. Neurourol Urodyn, 2010, 29(8),, ,1445-1450.