

## 4-Aminopyridine

## Chemical Properties

CAS No. :	504-24-5
Formula:	C <sub>5</sub> H <sub>6</sub> N <sub>2</sub>
Molecular Weight:	94.11
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	4-Aminopyridine (Dalfampridine) is a nonselective potassium (K <sup>+</sup> ) channel blocker that binds to the cytoplasmic side of the cell membrane.
Targets(IC50)	Potassium Channel

## Solubility Information

Solubility	DMSO: 45 mg/mL (478.16 mM),Sonication is recommended. H <sub>2</sub> O: 100 mg/mL (1062.59 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 (21.25 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	10.6259 mL	53.1293 mL	106.2586 mL
5 mM	2.1252 mL	10.6259 mL	21.2517 mL
10 mM	1.0626 mL	5.3129 mL	10.6259 mL
50 mM	0.2125 mL	1.0626 mL	2.1252 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

Sherratt, R.M., H. Bostock, and T.A. Sears, Effects of 4-aminopyridine on normal and demyelinated mammalian nerve fibres. *Nature*, 1980. 283(5747): p. 570-2.

Bouchard, R. and D. Fedida, Closed- and open-state binding of 4-aminopyridine to the cloned human potassium channel Kv1.5. *J Pharmacol Exp Ther*, 1995. 275(2): p. 864-76.

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