4-Aminopyridine

Product Number  A 0152
Store at Room Temperature

Product Description
Molecular Formula: C₅H₆N₂
Molecular Weight: 94.12
CAS Number: 504-24-5
Melting Point: 158-159 °C
λmax: 263 nm (0.1 M HCl)¹, 262 nm (0.1 M HCl)³
Extinction Coefficient: E¹M = 16.6 (0.1 M HCl), 17.4 (0.1 M HCl)³
Synonyms: fampridine, 4-pyridinamine,
4-pyridylamine, 4-AP²

4-aminopyridine (4-AP) is a non-selective potassium channel blocker. It reverses saxitoxin and tetrodotoxin induced cardiorespiratory depression.⁴ 4-AP increases stimulation-induced release of acetylcholine and induces depolarization of GABA neurons.⁵

An investigation into two different potassium channels which have different state dependencies of 4-AP binding has been reported.⁶ The effect of 4-AP on contractile tone and responses to the spasmogens 5-hydroxytryptamine and endothelin 1 in rats with and without hypoxic pulmonary hypertension has been studied.⁷ A study of the induction of epileptiform activity with 4-aminopyridine in rats with absence epilepsy has been published.⁸

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is soluble in water (50 mg/ml), with heat as needed, yielding a clear, colorless to very faint yellow solution.

References
1. The Merck Index, 12th ed., Entry# 3974.