Datasheet

**Product overview**

**Name**
4-Aminopyridine (4-AP)

**Cat No**
HB1073

**Short description**
Non-selective voltage gated K⁺ channel blocker

**Biological description**
4-Aminopyridine (4-AP) is a non-selective voltage gated K⁺ channel blocker which blocks Kv1.1 and Kv1.2 channels (IC₅₀ values are 170 and 230 µM respectively).

- 4-aminopyridine facilitates synaptic and neuromuscular transmission.

- 4-AP shows proconvulsive actions.

**Alternative names**
4-AP, 4AP

**Biological action**
Blocker

**Purity**
>99%

---

**Properties**

**Chemical name**
4-Aminopyridine

**Molecular Weight**
94.12

**Chemical structure**

![Chemical structure of 4-Aminopyridine](image)

**Molecular Formula**
C₅H₆N₂

**CAS Number**
504-24-5

**PubChem identifier**
1727

**SMILES**
C1=CN=CC=C1N

**InChI**
InChI=1S/C5H6N2/c6-5-1-3-7-4-2-5/h1-4H,(H2,6,7)

**InChiKey**
NUKYPUAOHBNCYPY-UHFFFAOYSA-N

**MDL number**
MFCD00006439

**Appearance**
White solid

---

**Storing and Using Your Product**

**Storage instructions**
Room temperature

**Solubility overview**
Soluble in water (100mM) and in DMSO (100 mM)

**Important**
This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

---

**References for 4-Aminopyridine (4-AP)**
4-Aminopyridine ameliorates mobility but not disease course in an animal model of multiple sclerosis.
PubMedID: 23748135

Identification of selective inhibitors of the potassium channel Kv1.1-1.2(3) by high-throughput virtual screening and automated patch clamp.
PubMedID: 22473914

Temporal lobe epileptiform activity following systemic administration of 4-aminopyridine in rats.
PubMedID: 23521339

Different state dependencies of 4-aminopyridine binding to rKv1.4 and rKv4.2: role of the cytoplasmic halves of the fifth and sixth transmembrane segments.
PubMedID: 10411564