N-Benzylacetamidine (hydrobromide)
Item No. 13570

CAS Registry No.: 186545-76-6
Formal Name: N-(phenylmethyl)-ethanimidamide, monohydrobromide
MF: C_{9}H_{12}N_{2} • HBr
FW: 229.1
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures
For long term storage, we suggest that N-benzylacetamidine (hydrobromide) be stored as supplied at -20°C. It should be stable for at least two years.

N-Benzylacetamidine (hydrobromide) is supplied as a crystalline solid. A stock solution may be made by dissolving the N-benzylacetamidine (hydrobromide) in the solvent of choice. N-Benzylacetamidine (hydrobromide) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of N-benzylacetamidine (hydrobromide) in these solvents is approximately 25, 15, and 20 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of N-benzylacetamidine (hydrobromide) can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of N-benzylacetamidine (hydrobromide) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Of the different types of nitric oxide synthases (NOS), the inducible (iNOS) form contributes to inflammation and immune response while the constitutively-expressed endothelial (eNOS) enzyme plays important roles in regulating vascular tone. N-Benzylacetamidine is a potent inhibitor of iNOS (IC_{50} = 0.20 μM), with over 1,000-fold selectivity compared to eNOS (IC_{50} = 350 μM).^{1}

Reference

Related Products
L-NIL (hydrochloride) - Item No. 80310 • 1400W (hydrochloride) - Item No. 81520