Indole-3-Acetic Acid (sodium salt)
Item No. 16954

CAS Registry No.: 6505-45-9
Formal Name: 1H-indole-3-acetic acid, monosodium salt
Synonyms: Heteroauxin, IAA
MF: C_{10}H_{8}NO_2 • Na
FW: 197.2
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 225, 279 nm

Laboratory Procedures
For long term storage, we suggest that Indole-3-Acetic acid (IAA) (sodium salt) be stored as supplied at -20°C. It should be stable for at least two years.

IAA (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the IAA (sodium salt) in the solvent of choice. IAA (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of IAA (sodium salt) in these solvents is approximately 1, 15, and 10 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 IAA (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of IAA (sodium salt) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

IAA is a naturally occurring plant hormone of the auxin class. It can stimulate cell elongation and division, promoting plant growth and development. However, at high concentrations it exhibits growth inhibiting effects, including epinasty and prevention of shoot and root growth. This latter effect formed the basis for which synthetic auxins were developed as herbicides and bioregulators in agriculture.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/16954