2-Amino-5-fluorobenzoic Acid
Item No. 16669

CAS Registry No.: 446-08-2
Formal Name: 2-amino-5-fluoro-benzoic acid
Synonyms: 5- FAA, 5-Fluoroanthranilic Acid, NSC 513308
MF: C7H6FNO2
FW: 155.1
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: \( \lambda_{\text{max}} \) 215, 245, 348 nm

Laboratory Procedures
For long term storage, we suggest that 2-amino-5-fluorobenzoic acid be stored as supplied at -20°C. It should be stable for at least two years.

2-Amino-5-fluorobenzoic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-amino-5-fluorobenzoic acid in the solvent of choice. 2-Amino-5-fluorobenzoic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 2-amino-5-fluorobenzoic acid in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

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 FAA can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 2-amino-5-fluorobenzoic acid in PBS, pH 7.2, is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

2-Amino-5-fluorobenzoic acid is a toxic antimetabolite for the tryptophan pathway in yeast that can be used to counterselect for TRP1, a commonly used genetic marker in S. cerevisiae. Because this trp1 strain lacks the enzymes required for the conversion of anthranilic acid to tryptophan, it is resistant to 2-amino-5-fluorobenzoic acid feedback inhibition, enabling a growth-based, positive selection of the TRP1 marker. 2-Amino-5-fluorobenzoic acid is frequently used in genetic procedures that involve plasmid manipulations.

Reference

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/16669