

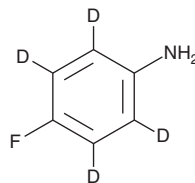
PRODUCT INFORMATION



4-Fluoroaniline-d₄

Item No. 42441

CAS Registry No.: 1093659-81-4
Formal Name: 4-fluoro-benzen-2,3,5,6-d₄-amine
Synonyms: *p*-Fluoroaniline-d₄, *para*-Fluoroaniline-d₄
MF: C₆H₂D₄FN
FW: 115.1
Chemical Purity: ≥95% (4-Fluoroaniline)
Deuterium
Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
Supplied as: A liquid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

4-Fluoroaniline-d₄ is intended for use as an internal standard for the quantification of 4-fluoroaniline by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

4-Fluoroaniline-d₄ is supplied as a liquid. A stock solution may be made by dissolving the 4-fluoroaniline-d₄ in the solvent of choice, which should be purged with an inert gas. 4-Fluoroaniline-d₄ is soluble (≥10 mg/ml) in organic solvents such as ethanol and DMSO.

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 4-fluoroaniline-d₄ can be prepared by directly dissolving the liquid in aqueous buffers. 4-Fluoroaniline-d₄ is soluble (≥10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

4-Fluoroaniline is a synthetic intermediate.¹ It has been used in the synthesis of perfumes, herbicides, and various lab reagents. *In vivo*, 4-fluoroaniline induces hindlimb paralysis and peripheral nerve fiber degeneration in rats.

Reference

1. Okazaki, Y., Yamashita, K., Ishii, H., *et al.* Potential of neurotoxicity after a single oral dose of 4-bromo-, 4-chloro-, 4-fluoro- or 4-iodoaniline in rats. *J. Appl. Toxicol.* **23**(5), 315-322 (2003).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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