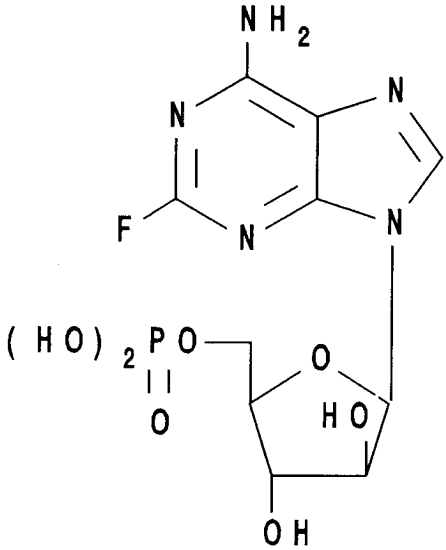
FLUDARABINE PHOSPHATE

NSC - 312887

The following information applies to the injectable dosage form of fludarabine supplied by Berlex, for clinical trials sponsored by the Division of Cancer Treatment, National Cancer Institute.



Chemical Name: 2-Fluoro-9-(5-O-phosphono-β-D-arabino-furanosyl)-9H-purin-6-amine

Other Names: Fludara™; FAMP; Fludarabine Phosphate (USAN)

2-Fluoro-Adenine Arabinoside-5-phosphate; 2-Fluoro-ARA AMP

CAS Registry Number: 75607-67-9

Molecular Formula: $C_{10}H_{13}FN_5O_7P$ **M.W.:** 401.2

How Supplied: For injection, 50 mg, vial: supplied as a white lyophilized powder with mannitol, USP, 50 mg, and sodium hydroxide to adjust pH in a 5 mL flint vial.

Solution Preparation: 50 mg/vial: When constituted with 2 mL of Sterile Water for Injection, USP, each mL of the resulting solution contains 25 mg of fludarabine phosphate, 25 mg of mannitol, USP, and sodium hydroxide to adjust to pH 6.5 to 8.5.

Storage: Store the intact vials at refrigerated temperature (2-8 °C).

Stability: Shelf-life surveillance of the intact vials is ongoing. Berlex is now conducting shelf-life evaluation of this drug.

Fludarabine phosphate is relatively stable in aqueous solution. Over a pH range of approximately 4.5 to 8 in aqueous buffer solutions stored at 65 °C, less than 4% decomposition occurred in 1 day and less than 10% occurred in 4 days. At pH 3 at 65 °C, approximately 11% decomposition occurred in one day. From this pH profile, the optimum pH was determined to be approximately 7.6.

At a concentration of 25 mg/mL in distilled water stored at room temperature (22-25 °C) in normal laboratory light, fludarabine phosphate exhibited less than 2% decomposition in 16 days.

Diluted to a concentration of 1 mg/mL in 5% Dextrose Injection, USP, or in 0.9% Sodium Chloride Injection, USP, less than 3% decomposition occurred in 16 days at room temperature (22-25 °C) under normal laboratory light.

Diluted to a concentration of 0.04 mg/mL in 5% Dextrose Injection, USP, or in 0.9% Sodium Chloride Injection, USP, in glass bottles and PVC bags, little or no loss occurred in 48 hours at room temperature (22-25 °C) exposed to normal laboratory light and under refrigeration (2-8 °C).

> **CAUTION**: The single-use lyophilized dosage form contains no antibacterial preservatives. Therefore, it is advised that the constituted product be discarded within 8 hours of initial entry.

Route of Administration: Intravenous