

## Fludarabine, DNA synthesis inhibitor

Catalog	Unit
TBI5047-10MG	10 mg
TBI5047-50MG	50 mg

### Product Details

**Formal Name:** 9-β-D-Arabinofuranosyl-2-fluoro-9H-purin-6-amine

**Alternate Names:** F-ara-A; NSC118218

**Molecular Formula:** C<sub>10</sub>H<sub>12</sub>FN<sub>5</sub>O<sub>4</sub>

**Formula Weight:** 285.2

**CAS Number:** 21679-14-1

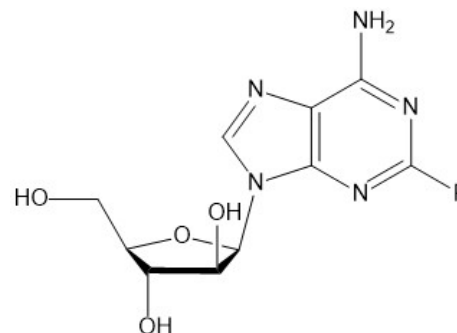
**Purity:** >98%

**Formulation:** Powder

**Solubility:** Soluble in DMSO (up to 30 mg/ml)

**Storage:** -20°C

**Stability:** ≥ 1 year.



### Applications

DNA synthesis inhibitor

### Functions

A synthetic adenosine analog that inhibits DNA biosynthesis and is a clinically useful antineoplastic agent. In cells fludarabine accumulates as its 5'-triphosphate (F-ara-ATP) for which the rate-limiting step in formation is the conversion of fludarabine to its monophosphate. F-ara-ATP has multiple mechanisms of action including inhibition of ribonucleotide reductase, DNA polymerase, ligase and primase. A frequently used agent in myeloablative conditioning regimens for allogeneic hematopoietic cell transplantation. Immunosuppressive effects are mediated via inhibition of TNF $\alpha$ -stimulated production of IL-2 and IFN- $\gamma$  through inactivation of NF $\kappa$ B. Antagonist at adenosine A1 receptors.

### Application Procedures

First dissolved in DMSO (up to 30 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

**For research use only.**