# PRODUCT INFORMATION



## Fludarabine Phosphate

Item No. 14251

CAS Registry No.: 75607-67-9

2-fluoro-9-(5-O-phosphono-β-D-arabinofuranosyl)-Formal Name:

9H-purin-6-amine

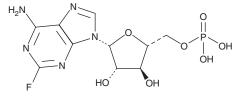
Synonyms: F-ara-AMP, NSC 312887, NSC 328002

MF:  $C_{10}H_{13}FN_5O_7P$ 

FW: 365.2 ≥95% **Purity:** UV/Vis.:  $\lambda_{\text{max}}$ : 261 nm Supplied as: A crystalline solid

Storage: -20°C Stability: ≥2 years

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



## **Laboratory Procedures**

Fludarabine phosphate is supplied as a crystalline solid. Aqueous solutions of fludarabine phosphate can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of fludarabine phosphate in PBS, pH 7.2, is approximately 3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

Fludarabine phosphate is an injectable form of fludarabine (Item No. 14128).<sup>1</sup> Fludarabine is an adenosine deaminase resistant analog of 9-β-D-arabinofuranosyladenine (ara-A) that disrupts ribonucleotide reductase and DNA polymerase in blood cells. It exhibits antiproliferative activity (IC $_{50}$  = 1.54  $\mu M$  in an RPM-I8226 myeloma cell line) and triggers apoptosis by increasing Bax and decreasing Bid, XIAP, and survivin expression.<sup>2,3</sup> Fludarabine is effective in a number of animal tumor systems including LI210 leukemia, CD8F mammary adenocarcinoma, P388 leukemia, and human LX-1 lung tumor xenograft and displays anti-cancer activity against human hematological malignancies in vivo. 1,4-5

## References

- 1. Spriggs, D.R., Stopa, E., Mayer, R.J., et al. Fludarabine phosphate (NSC 312878) infusions for the treatment of acute leukemia: Phase I and neuropathological study. Cancer Res. 46, 5953-5958 (1986).
- 2. Meng, H., Yang, C., Ni, W., et al. Antitumor activity of fludarabine against human multiple myeloma in vitro and in vivo. Eur. J. Haematol. 79(6), 486-493 (2007).
- Bellosillo, B., Villamor, N., Colomer, D., et al. In vitro evaluation of fludarabine in combination with cyclophosphamide and/or mitoxantrone in B-cell chronic lymphocytic leukemia. Blood 94(8), 2836-2843 (1999).
- Tournilhac, O., Cazin, B., Leprètre, S., et al. Impact of frontline fludarabine and cyclophosphamide combined treatment on peripheral blood stem cell mobilization in B-cell chronic lymphocytic leukemia. Blood 103(1), 363-365 (2004).
- 5. Rai, K.R., Peterson, B.L., Appelbaum, F.R., et al. Fludarabine compared with chlorambucil as primary therapy for chronic lymphocytic leukemia. N. Engl. J. Med. 343(24), 1750-1757 (2000).

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

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.

#### WARRANTY AND LIMITATION OF REMEDY

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