LKT Laboratories, Inc.

Fotemustine

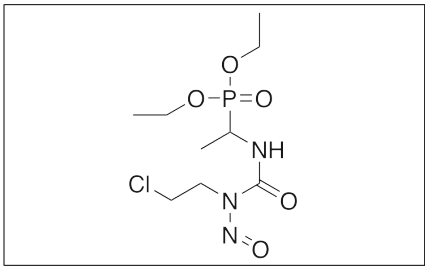
Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID F5976
CAS No. 92118-27-9
Chemical Name

Synonym Mustophorane; Muphoran

Formula $C_9H_{19}ClN_3O_5P$
Formula Wt. 315.69
Melting Point
Purity ≥98%
Solubility



Bulk quanitites available upon request

Product ID	Size
F5976	5 mg
F5976	25 mg
F5976	100 mg

Store Temp 4°C
Ship Temp Ambient

Description Fotemustine is a chloroethylnitrosourea that exhibits anticancer chemotherapeutic benefit. Fotemustine alkylates or induces cross-links in DNA, halting cell cycle progression at the G2/M phase and inhibiting DNA repair mechanisms. Fotemustine displays greater cytotoxicity in methyl excision repair-deficient cells, indicating its primary site of alkylation is the *O6* site of guanine bases. Fotemustine may also deactivate thioredoxin reductase, glutathione reductase, and ribonucleotide reductase by alkylating their thiol active sites.

References

Hayes MT, Bartley J, Parsons PG. In vitro evaluation of fotemustine as a potential agent for limb perfusion in melanoma. Melanoma Res. 1998 Feb;8(1):67-75. PMID: 9508380.

Hayes MT, Bartley J, Parsons PG, et al. Mechanism of action of fotemustine, a new chloroethylnitrosourea anticancer agent: evidence for the formation of two DNA-reactive intermediates contributing to cytotoxicity. Biochemistry. 1997 Sep 2;36(35):10646-54. PMID: 9271495.

Schallreuter KU, Gleason FK, Wood JM. The mechanism of action of the nitrosourea anti-tumor drugs on thioredoxin reductase, glutathione reductase and ribonucleotide reductase. Biochim Biophys Acta. 1990 Aug 13;1054(1):14-20. PMID: 2200526.