



## **Ifosfamide**

Catalog No: tcsc1424



## **Available Sizes**

Size: 200mg

Size: 500mg



## **Specifications**

**CAS No:** 

3778-73-2

Formula:

 $C_7H_{15}CI_2N_2O_2P$ 

**Pathway:** 

Cell Cycle/DNA Damage

**Target:** 

DNA Alkylator/Crosslinker

**Purity / Grade:** 

>98%

**Solubility:** 

DMSO : ≥ 50 mg/mL (191.50 mM)

**Observed Molecular Weight:** 

261.09

## **Product Description**

Ifosfamide is an **alkylating** chemotherapeutic agent with activity against a wide range of tumors.

IC50 & Target: DNA Alkylator<sup>[1]</sup>

*In Vitro:* Ifosfamide is an alkylating chemotherapeutic agent with activity against a wide range of tumors<sup>[1]</sup>. Ifosfamide is activated by the cytochrome P450 family. Ifosfamide (0-5 mM) suppresses the viability of CYP2B1-expressing C8III-1 cells, while it is cytotoxic





to the non-CYP2B1-expressing CrFK cells only at high concentration (5 mM) $^{[2]}$ . CYP BM3 mutants activates Ifosfamide, and Ifosfamide shows inhibitory activity against human U2OS cells $^{[3]}$ .

*In Vivo:* Ifosfamide (50 mg/kg, i.p.) treatment before mating increases percentage of post-implantation loss and resorbs fetuses in pregnant rats. Ifosfamide also (50 mg/kg, i.p.) decreases the progesterone in the serum of pregnant rats. However, Ifosfamide causes no obvious difference with the control rats at 25 mg/kg. Ifosfamide (25, 50 mg/kg, i.p.) induces apoptosis and histological changes in the placentas and prenatal rats, most sensitive fetal organs are the brain, liver and kidney<sup>[1]</sup>.

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!