



# Mesna

Catalog No: tcsc1364



### **Available Sizes**

Size: 5g

Size: 10g



## **Specifications**

CAS No:

19767-45-4

#### Formula:

 $C_2H_5NaO_3S_2$ 

#### **Pathway:**

Others

### **Target:**

Others

### **Purity / Grade:**

>98%

### **Solubility:**

 $H2O : \ge 50 \text{ mg/mL } (304.54 \text{ mM})$ 

#### **Alternative Names:**

Sodium 2-mercaptoethanesulfonate; Mesnum

### **Observed Molecular Weight:**

164.18

# **Product Description**

2-mercaptoethane sulfonate (Mesna), is a synthetic small molecule, widely used as a systemic protective agent against chemotherapy toxicity, but is primarily used to reduce hemorrhagic cystitis induced by cyclophosphamide.





#### Target:

in vitro: MESNA had no effect on the qualitative and quantitative characteristics of the indicated processes in both the types of the doxorubicin sensitive cells. The combined use of doxorubicin and phosphamide or cyclophosphane the use of MESNA for lowering the urotoxic action of oxazophosphorines had no effect on the biological efficacy of doxorubicin[3].

in vivo: AMH-positive follicles were significantly decreased after cisplatin administration, which was significantly reversed when mesna was co-administered with cisplatin. The end product of lipid peroxidation, malondialdehyde (MDA), was significantly increased, but the anti-oxidative enzymatic activity of superoxide dismutase (SOD) and glutathione (GSH) were significantly decreased in cisplatin groups when compared with NS group. In contrast, after co-administration of cisplatin with mesna, MDA was significantly decreased whereas the activity of SOD and the concentration of GSH were increased. Moreover, mesna did not decrease the anti-tumor property of cisplatin in HePG2 cell lines[2]. After head trauma, tissue malondialdehyde levels increased; these levels were significantly decreased by MESNA administration. Caspase-3 levels were increased after trauma, but no effect of MESNA was determined in caspase-3 activity[1].

Clinical trial: Effects of Mesna on Homocysteine in Kidney Failure . Phase2

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