



# **PMSF**

Catalog No: tcsc2617

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#### **Available Sizes**

Size: 100mg

Size: 500mg



## **Specifications**

**CAS No:** 

329-98-6

#### Formula:

 $C_7H_7FO_2S$ 

### **Pathway:**

Metabolic Enzyme/Protease

#### **Target:**

Cathepsin

#### **Purity / Grade:**

>98%

### **Solubility:**

DMSO: 20 mg/mL (114.82 mM; Need ultrasonic); H2O:

#### **Alternative Names:**

Phenylmethylsulfonyl fluoride; Benzylsulfonyl fluoride

## **Observed Molecular Weight:**

174.19

## **Product Description**

PMSF is an irreversible **serine/cysteine protease** inhibitor.

In Vitro:





PMSF (2 mM) inhibits carbachol-stimulated inositol phosphate accumulation in the presence of Li<sup>+</sup> by only 15%-19%. PMSF inhibition of phosphoinositide turnover is due to one or more steps following phosphoinositide breakdown<sup>[1]</sup>. PMSF inhibits the acylation of the inositol residue of GPI intermediates in bloodstream form *T. brucei*. PMSF inhibits the formntion of glycolipid C but does not inhibit fatty acid remodeling in vitro. PMSF inhibits GPI acylation and ethanolamine phosphatp addition in procyclic trypanosomes but not in Hela cells<sup>[2]</sup>.

*In Vivo:* PMSF (0.1 mL/10 g b.wt, i.p.) produces antinociception as indicated by the dose-responsive increase in % MPE in the tail-flick latency evaluation, but fails to produce a clear dose-responsive inhibition of locomotion. Mice receiving i.p. injections of PMSF exhibit cannabinoid effects that includes antinociception, hypothermia and immobility with ED<sub>50</sub> values of 86, 224 and 206 mg/kg, respectively. PMSF (30 mg/kg) pretreatment potentiates the effects of anandamide on tail-flick response (antinociception), spontaneous activity and mobility by 5-, 10- and 8-fold, respectively<sup>[3]</sup>.

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