



PMSF

Inhibitor of Serine proteases

Specifications

UP147376, 5g	Phenylmethylsulfonyl Fluoride
UP147373, 10g	
UP147374, 25g	
UP147375, 100g	
CAS Number:	329-98-6
Formula:	C ₇ H ₇ O ₂ SF
Molecular Weight:	174.2
Purity :	>99%
Storage:	Room temperature

Product Information

PMSF is an irreversible inhibitor of serine proteases including trypsin, chymotrypsin, and thrombin. PMSF causes sulfonylation of the active-site serine residues. It can also inhibit the cysteine protease, papain (reversible by DTT treatment). However, PMSF does not inhibit metalloproteases, aspartic proteases, and most cysteine proteases.

PMSF is soluble in methanol, ethanol, isopropanol, and 1,2 propanediol (up to ~10 mg/ml). It should be added fresh (from stock solution) at each step in a protein purification procedure since PMSF is relatively unstable in aqueous solutions. Stock solutions made in 100% isopropanol are stable for approximately 9 months at +25°C. The suggested final working concentration is 0.1-1mM (17-170 µg/ml).

Bibliographic references :

- James, J.T., (1978) *Anal. Biochem.*, **86**, 574
- Moss, D.E. and Fahmey, D.E. (1978) *Biochemical Pharmacology*, 27,2693