PENTAPHARM

Pefabloc[®] SC

Description:	Pefabloc [®] SC is an irreversible proteinase inhibitor with broad specificity for serine proteinases.			
Application:	Pefabloc [®] SC is suitable for biopharmaceutical downstream purification because of its superior solubility, stability, inhibitory activity and low toxicity.			
Formula:	C ₈ H ₁₀ FNO ₂ S·HCI	MW:	239.7	
Chem. Name:	4-(2-Aminoethyl)-benzenesulfonylfluoride hydrochloride (AEBSF)			
Solubility:	200 mg/ml in H ₂ O in water			
Storage:	May be used by the expiry date given on the label when stored unopened, protected from moisture, in the dark, 2 - 8°C. Avoid contamination of the reagents by micro- organisms. Shipment of product does not require cooling during the time of transportation.			

Enzyme	Enzyme conc.	IC₅₀ [mM]
Trypsin	0.2 μg/ml	0.081
Chymotrypsin	2.44 μg/ml	0.044
Thrombin	0.079µg/ml	0.92
Factor Xa	0.12 U/ml	24.0
Plasmin	4 CTA-U/ml	1.99
tPA	5.0 μg/ml	0.72
uPA	24.0 μg/ml	0.072
Glandular kallikrein	3.5 μg/ml	2.86
Elastase	2.44 μg/ml	0.525
Subtilisin A	0.49 μg/ml	1.801
Factor XIIa	0.013 Ū/ml	0.256

References:	 Chu TM, Kawinski E. Plasmin, subtilisin-like endoproteases, tissue plasminogen activator, and urokinase plasminogen activator are involved in activation of latent TGF-β1 in human seminal plasma. Biochem Biophys Res Commun 1998; 253: 128-34. Kaino S, Furui T, Hatano S, Kaino M, Okita K, Nakamura K. Twodimensional zymography for analysis of proteolytic enzymes in human pure pancreatic juice. Electrophoresis 1998; 19: 782-7. Mackarel AJ, Cottell DC, Russell KJ, Fitzgerald MX, O'Connor CM. Migration of neutrophils across human pulmonary endothelial cells is not blocked by matrix metalloproteinase or serine protease inhibitors. Am J Respir Cell Mol Biol 1999; 20: 1209-19. Mintz GR. An irreversible serine protease inhibitor. Bio Pharm 1993; 6: 34-8. Ofosu FA, Freedman J, Dewar L, Song Y, Fenton JW. A trypsin-like platelet protease propagates protease-activated receptor-1 cleavage and platelet activation. Biochem J 1998; 336: 283-5. 		nan seminal nan pure ot blocked	
	Production, purification and characterization of a 50-kDa extracellular metalloprotease from Serratia marcescens. Appl Microbiol Biotechnol 1997; 48: 317-24.			
	Winton HL, Wan H, Cannell MB, Thompson PJ, Garrod DR, Stewart GA, Robinson C. Class specific inhibition of house dust mite proteinases which cleave cell adhesion, induce cell death and which increase the permeability of lung epithelium. Brit J Pharmacol 1998; 124: 1048-59.			
Package size:	Vial 1 g and 10 g	Code:	399-01	

FOR RESEARCH USE ONLY. NOT FOR HUMAN USE OR DRUG USE.