

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: C₈H₁₀FNO₂S·HCl **MW:** 239.7

Chem. Name: 4-(2-Aminoethyl)-benzenesulfonylfluoride hydrochloride (AEBSF)

Solubility: 200 mg/ml in H₂O 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.

IC₅₀ values: The following table shows IC₅₀ values for a selection of enzymes determined at pH 7.0, 25 °C after 15 minutes incubation time.

Enzyme	Enzyme conc.	IC ₅₀ [mM]
Trypsin	0.2 µg/ml	0.081
Chymotrypsin	2.44 µg/ml	0.044
Thrombin	0.079 µg/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 U/ml	0.256

References:

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Migration of neutrophils across human pulmonary endothelial cells is not blocked by matrix metalloproteinase or serine protease inhibitors.
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A trypsin-like platelet protease propagates protease-activated receptor-1 cleavage and platelet activation.
Biochem J 1998; 336: 283-5.

Salamone PR, Wodzinski RJ.
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.
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Package size: Vial 1 g and 10 g

Code: 399-01

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