

# Pefabloc<sup>®</sup> PK

**Description:** Pefabloc<sup>®</sup> PK, a 4- amidinoanilide derivative of phenyl-2-aminobutyric acid, is a relatively selective inhibitor of plasma kallikrein (PK). The inhibitory effect depends on the pH-value. It is increased below pH 7.0 and is decreased above pH 8.0.

**Application:** Pefabloc<sup>®</sup> PK is employed to inhibit plasma kallikrein (PK) competitively. Pefabloc<sup>®</sup> PK is used in chromogenic assays for the determination of factor XIIa activity in plasma with Pefachrome<sup>®</sup>FXIIa. Pefabloc<sup>®</sup>PK suppresses undesired cleavage of the substrate by plasma kallikrein.

**Formula:** C<sub>24</sub>H<sub>26</sub>N<sub>4</sub>O<sub>3</sub>S·HCl **MW:** 487.0

**Chem. name:** 2-Tosyl-(D,L)-homophenylalanine-4-amidinoanilide hydrochloride

**Solubility:** Bulk: readily soluble in organic solvents (methanol, ethanol, DMSO), soluble in 4 mM H<sub>2</sub>O and in aqueous buffers  
Vials: Reconstitute content in water or buffer at the recommended concentrations

**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.

**K<sub>i</sub> constants:** The following table shows the inhibition of different serine proteinases.

Enzyme	K <sub>i</sub> [μM]
Trypsin	1.3
Thrombin	170
Factor Xa	31
Factor XIIa	100
Plasmin	10
uPA	17
tc-tPA	36
Plasma kallikrein	0.7
Glandular kallikrein	100
Batroxobin (B. atrox)	5.7
Batroxobin (B. moojeni)	11.7
PCa	79
Tryptase	12

**References:** Vieweg H, Wagner G. Synthese von α-(Arylsulfonylamino)-ω-phenyl-alkylcarbonsäure-3- und 4-amidinoaniliden. Pharmazie 1983; 38: 818-20.

Stürzebecher J, Svendsen L, Eichenberger R, Markwardt F.  
A new assay for the determination of factor XII in plasma using a chromogenic substrate and a selective inhibitor of plasma kallikrein. Thromb Res 1989; 55: 709-15.

**Package size:** Bulk [mg] **Code:** 380-03

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