## PENTAPHARM

## **Pefachrome<sup>®</sup> FVIIa**

Application:	Highly sensitive chromogenic peptide substrate for factor VIIa. Determination of factor VIIa activity for research, in-process and quality control of factor VIIa preparations.		
Formula:	CH <sub>3</sub> SO <sub>2</sub> -D-CHA-But-Arg-pNA·AcOH		
Principle:	CH₃SO₂-D-CHA-But-Arg-pNA + E ==> CH₃SO₂-D-CHA-But-Arg-OH + pNA + E E = Enzyme (factor VIIa)		
Solubility:	Up to 4 mM in dist. H <sub>2</sub> O	MW:	670.8
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.		
Note:	The sensitivity of this substrate for factor VIIa is significantly increased in the presence of tissue factor (TF).		
Kinetic data:	K <sub>M</sub>	V <sub>max</sub>	

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without TF	5.0 mM	6.72 nmol/min
with TF Ratio VIIa / TF:≈1/10	0.97 mM	69.7 nmol/min

## Material required but not provided:

Tissue factor (TF), buffer, dist. water

Tissue factor: 0.31 mg/ml

Buffer: 0.1 M Tris, 100 mM NaCl, 5 mM CaCl<sub>2</sub>, 0.1% BSA, pH 8.4

Assay: Suggested protocol for the determination of factor VIIa activity:

0.020 ml factor VIIa (0.025 mg/ml) 0.020 ml TF => 2 min at 37 °C 1.760 ml buffer 0.200 ml Pefachrome<sup>®</sup> FVIIa (4 mM in dist. water) => Determination of ∆OD/min at 405 nm

Package size: Bulk [g]

Code: 093-01

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