

Pefachrome[®] FVIIa (Pefa-5979)

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: CH₃SO₂-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. H₂O

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 _M	v _{max}
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 CaCl₂, 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[®]FVIIa (4 mM in dist. water)
 => Determination of ΔOD/min at 405 nm

Package size: Vial containing 10 μmol
Bulk [g]

Code: 093-20
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