

**Pefachrome® 6017 (article number 081-45)**  
**Pefachrome® FXII/TH 5253 (article number 081-11)**

**Application:** Highly sensitive chromogenic peptide substrate for factor XIIa. Determination of factor XIIa activity for research, in-process and quality control.

**Formula:** H-D-CHA-Gly-Arg-pNA-2AcOH **MW:** 624.7

**Principle:** H-D-CHA-Gly-Arg-pNA + FXIIa ==> H-D-CHA-Gly-Arg-OH + pNA + FXIIa

**K<sub>M</sub>:** 0.8 mM **V<sub>max</sub>:** 3.14 µmol/min

**Solubility:** Up to 4 mM in H<sub>2</sub>O

**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.

**Material required but not provided:**

Buffer, NaCl, reference material, dist. H<sub>2</sub>O, Pefabloc® PK, Kalliplastin®

**Buffer:** 50 mM Tris-imidazole buffer pH 7.9, 150 mM NaCl

**Assay 1:** Suggested protocol for the determination of factor XIIa activity:

1.700 ml 50 mM	0.700 ml buffer 0.100 ml factor XIIa (0.2 units/ml) 0.200 ml Pefachrome®6017 4 mM ==> Determination of ΔOD/min at 405 nm
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**Assay 2:** Suggested protocol for the determination of factor XIIa activity (FXII activated by Kalliplastin®) using Pefachrome®6017 and a selective synthetic inhibitor of plasma kallikrein (Pefabloc® PK):

0.100 ml citrated plasma (diluted 1:5 with NaCl) 0.200 ml Kalliplastin® (20 µg/ml, Pentapharm Ltd.) ⇒ incubate for 1 min at 37 °C 0.500 ml buffer 0.100 ml Pefabloc® PK 0.2 mM 0.100 ml Pefachrome®6017 2 mM ==> Determination of ΔOD/min at 405 nm
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**Reference:** 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:** Vial containing 10 µmol  
Bulk [g]

**Code:** 081-45  
081-11

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