

# Pefachrome<sup>®</sup> 6017

**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<sup>®</sup> PK, Kalliplastin<sup>®</sup>

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

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

0.700 ml buffer  
0.100 ml factor XIIa (0.2 units/ml)  
0.200 ml Pefachrome<sup>®</sup> 6017 4 mM  
==> Determination of ΔOD/min at 405 nm

**Assay 2:** Suggested protocol for the determination of factor XIIa activity (FXII activated by Kalliplastin<sup>®</sup>) using Pefachrome<sup>®</sup> 6017 and a selective synthetic inhibitor of plasma kallikrein (Pefabloc<sup>®</sup> PK):

0.100 ml citrated plasma (diluted 1:5 with NaCl)  
0.200 ml Kalliplastin<sup>®</sup> (20 µg/ml, Pentapharm Ltd.)  
⇒ incubate for 1 min at 37 °C  
0.500 ml buffer  
0.100 ml Pefabloc<sup>®</sup> PK 0.2 mM  
0.100 ml Pefachrome<sup>®</sup> 6017 2 mM  
==> Determination of ΔOD/min at 405 nm

**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

FOR RESEARCH USE ONLY. NOT FOR HUMAN USE OR DRUG USE.