PENTAPHARM

Pefachrome®FXIIa

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

Formula: H-D-HHT-Gly-Arg-pNA·2AcOH **MW:** 640.7

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

K_M: 0.8 mM **v_{max}:** 3.14 µmol/min

Solubility: Up to 4 mM in H_2O

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_2O, 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:

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

Assay 2: Suggested protocol for the determination of factor XIIa activity (FXII activated by Kalliplastin®) using Pefachrome®FXIIa 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®FXIIa 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 **Code:** 092-21
Bulk [g] 092-02

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

Pentapharm Ltd, Engelgasse 109, P.O. Box, CH-4002 Basel / Switzerland
Phone : +41-61-706 48 48, Fax : +41-61-319 96 19, http://www.pentapharm.com