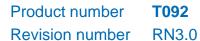
Product Data Sheet





Product Name Human blood coagulation Factor XIII-A₂, recombinant

(hFXIII, A subunit, recombinantly produced in human embryonic kidney cells)

Synonym Recombinant Fibrin stabilizing factor, protein-glutamine-γ-glutamyltransferase

Source Recombinantly produced in human embryonic kidney cells (HEK-293F)

Quantity 100 μg

Molecular Weight 83 kDa (monomer); 166 kDa (homodimer)

Description Recombinant human Factor XIII is a homodimer (A₂) composed by two chains held together by

non-covalent bonds. It is N-terminally fused to a hexahistidine-tag. After activation of the zymogen by Thrombin and Ca^{2+} to its active form (Factor XIIIa), Factor XIIIa catalyzes the formation of covalent bridges (ϵ -(γ -glutamyl) lysine bonds) between fibrin units to increase the elasticity of the

clot network. The resulting cross-linked fibrin is insoluble and resistant to lysis.

Application FXIIIa catalyzes acyl transfer reactions from glutamine residues in proteins or peptides to primary

amines, e. g. the formation of ε -(γ -glutamyl) lysine bonds between proteins by transferring the acyl group of a peptide-bound glutamine residue to the primary amino group of a peptide-bound lysine

residue.

Appearance White lyophilized solid.

Reagents The recombinant human Factor XIII is lyophilized from 20 mM Tris-HCl pH 7.5, 150 mM NaCl,

1 mM EDTA, 1 mM DTT. Sample contains maltodextrin.

Reconstitution Add the volume of water specified in the certificate of analysis under aliquotation to the vial of

lyophilized powder. Rotate vial gently until solid dissolves. After reconstitution the solution should

be stored frozen in undiluted working aliquots. For short term storage keep cooled on ice.

Storage Store at -80°C.

If storage at -80°C is not possible, storage at ≤ -20°C is recommended. While no formal stability

data are available at -20°C, according to our overall experience stability is still given.

Upon reconstitution, store undiluted working aliquots preferably at -80°C (if not possible at ≤ -20°C, see comment above). Storage of diluted aliquots may result in severe activity loss. Avoid

repeated freezing and thawing.

Delivery at ambient temperature is possible

Related products A101 FXIII-Assay Substance, Abz-NE(CAD-DNP)EQVSPLTLLK-OH

F001 FXIII-Assay Kit

T007 Coagulation factor XIII, purified from human plasma

T101 1,3,4,5-Tetramethyl-2[(2-oxo-propyl)thio] imidazolium chloride

A016 Polyclonal antibody to human blood coagulation factor XIII (A-subunit)

Release date 20 December 2022

NOTE INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR

DIAGNOSTIC APPLICATIONS.