

## ARG81134 Human Factor XIII ELISA Kit

Package: 96 wells  
Store at: 4°C

### Component

Cat. No.	Component Name	Package	Temp
ARG81134-001	Antibody-coated Microtiter Plate	12 x 8 strips	4°C
ARG81134-002	20X wash buffer concentrate	30ml X 2 bottles	4°C
ARG81134-003	Plate sealer	3 pieces	4°C
ARG81134-004	Biotinylated Human Factor XIII antibody (50X)	1 vial (140 µl)	4°C
ARG81134-005	Human FXIII Standard	1 vial (160ng, lyophilized)	4°C
ARG81134-006	10X EIA Diluent	30 ml	4°C
ARG81134-007	100X Streptavidin-HRP	80 µl	4°C
ARG81134-008	TMB Substrate	8 ml	4°C, ready for use
ARG81134-009	STOP solution	12 ml	4°C, ready for use

### Summary

Product Description	ARG81134 Human Factor XIII ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Factor XIII in serum, plasma, cell culture, urine, saliva, milk and CSF.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	Factor XIII
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm
Sensitivity	2.1 ng/ml
Sample Type	Serum, plasma, cell culture, urine, saliva, milk and CSF
Standard Range	2.5 - 160 ng/ml
Sample Volume	50 µl
Precision	Intra-Assay CV: 4.4% Inter-Assay CV: 9.4%
Alternate Names	Coagulation factor XIIIa; F13A; Protein-glutamine gamma-glutamyltransferase A chain; Coagulation factor XIII A chain; Transglutaminase A chain; EC 2.3.2.13

## Application Instructions

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Assay Time ~ 4 hours

## Properties

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**Form** 96 well

**Storage instruction** Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

**Note** For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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**Database links** [GeneID: 2162 Human](#)  
[Swiss-port # P00488 Human](#)

**Gene Symbol** F13A1

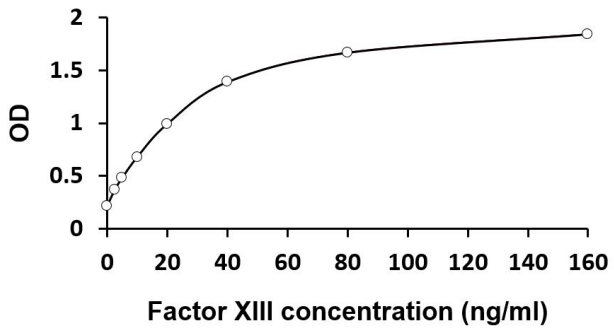
**Gene Full Name** coagulation factor XIII, A1 polypeptide

**Background** This gene encodes the coagulation factor XIII A subunit. Coagulation factor XIII is the last zymogen to become activated in the blood coagulation cascade. Plasma factor XIII is a heterotetramer composed of 2 A subunits and 2 B subunits. The A subunits have catalytic function, and the B subunits do not have enzymatic activity and may serve as plasma carrier molecules. Platelet factor XIII is comprised only of 2 A subunits, which are identical to those of plasma origin. Upon cleavage of the activation peptide by thrombin and in the presence of calcium ion, the plasma factor XIII dissociates its B subunits and yields the same active enzyme, factor XIIIa, as platelet factor XIII. This enzyme acts as a transglutaminase to catalyze the formation of gamma-glutamyl-epsilon-lysine crosslinking between fibrin molecules, thus stabilizing the fibrin clot. It also crosslinks alpha-2-plasmin inhibitor, or fibronectin, to the alpha chains of fibrin. Factor XIII deficiency is classified into two categories: type I deficiency, characterized by the lack of both the A and B subunits; and type II deficiency, characterized by the lack of the A subunit alone. These defects can result in a lifelong bleeding tendency, defective wound healing, and habitual abortion. [provided by RefSeq, Jul 2008]

**Function** Factor XIII is activated by thrombin and calcium ion to a transglutaminase that catalyzes the formation of gamma-glutamyl-epsilon-lysine cross-links between fibrin chains, thus stabilizing the fibrin clot. Also cross-link alpha-2-plasmin inhibitor, or fibronectin, to the alpha chains of fibrin. [UniProt]

**Highlight** Related products:  
[Factor XIII antibodies](#); [Factor XIII ELISA Kits](#);  
New ELISA data calculation tool:  
[Simplify the ELISA analysis by GainData](#)

**PTM** The activation peptide is released by thrombin.



ARG81134 Human Factor XIII ELISA Kit standard curve image

ARG81134 Human Factor XIII ELISA Kit results of a typical standard run with optical density reading at 450 nm.