

Product datasheet

Human Factor VII ELISA Kit (with plasma controls) ab168545

[2 References](#) [1 Image](#)

Overview

Product name Human Factor VII ELISA Kit (with plasma controls)

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Overall				2.9%

Inter-assay

Sample	n	Mean	SD	CV%
Overall				8.4%

Sample type Cell culture supernatant, Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity > 0.15 ng/ml

Range 2 ng/ml - 22.5 ng/ml

Recovery 96 %

Assay time 4h 00m

Species reactivity **Reacts with:** Human

Product overview

Abcam's Factor VII Human *in vitro* ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of Factor VII levels in cell culture supernatants, serum and plasma.

A Factor VII specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently a Factor VII specific biotinylated detection antibody is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Conjugate is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize Streptavidin-Peroxidase enzymatic reaction. TMB is catalyzed by Streptavidin-Peroxidase to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is directly proportional to the amount of Factor VII captured in plate.

Get results in 90 minutes with Human Factor VII ELISA Kit ([ab190810](#)) from our SimpleStep ELISA® range.

The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
100X Streptavidin-Peroxidase Conjugate	1 x 80µl
10X Diluent N Concentrate	1 x 30ml
20X Wash Buffer Concentrate	2 x 30ml
50X Biotinylated Human Factor VII Antibody	1 x 120µl
Chromogen Substrate	1 x 7ml
Factor VII Microplate (12 x 8 well strips)	1 unit
Factor VII Standard	1 vial
Low control (Depleted Human Plasma)	1 vial
Positive control (Reference Plasma Control)	1 vial
Sealing Tapes	3 units
Stop Solution	1 x 11ml

Function Initiates the extrinsic pathway of blood coagulation. Serine protease that circulates in the blood in a zymogen form. Factor VII is converted to factor VIIa by factor Xa, factor XIIa, factor IXa, or thrombin by minor proteolysis. In the presence of tissue factor and calcium ions, factor VIIa then converts factor X to factor Xa by limited proteolysis. Factor VIIa will also convert factor IX to factor IXa in the presence of tissue factor and calcium.

Tissue specificity Plasma.

Involvement in disease Factor VII deficiency

Sequence similarities Belongs to the peptidase S1 family.
Contains 2 EGF-like domains.
Contains 1 Gla (gamma-carboxy-glutamate) domain.
Contains 1 peptidase S1 domain.

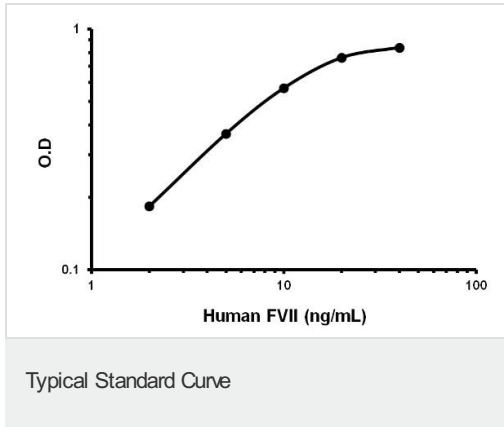
Post-translational modifications The vitamin K-dependent, enzymatic carboxylation of some glutamate residues allows the modified protein to bind calcium.
The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R) stereospecific within EGF domains.

O- and N-glycosylated. N-glycosylation at Asn-205 occurs cotranslationally and is mediated by STT3A-containing complexes, while glycosylation at Asn-382 is post-translational and is mediated STT3B-containing complexes before folding. O-fucosylated by POFUT1 on a conserved serine or threonine residue found in the consensus sequence C2-X(4,5)-[S/T]-C3 of EGF domains, where C2 and C3 are the second and third conserved cysteines.

Cellular localization

Secreted.

Images



Representative Standard Curve using ab168545

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