

General Prothrombin total antigen assay ELISA Kit | F2 elisa kit

Human Prothrombin total antigen assay ELISA Kit

CATALOG #
AAA37734

REACTIVITY
General

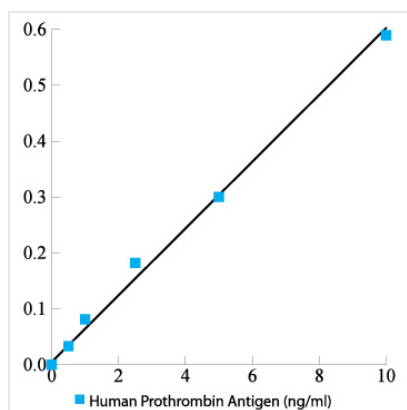
PRODUCT SYNONYMS

Prothrombin total antigen assay; Human Prothrombin total antigen assay ELISA Kit; F2 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	General
Specificity	This assay recognizes natural human total prothrombin (prothrombin, thrombin, and thrombin-antithrombin complex). Pooled normal plasma from mouse, pig, and canine were assayed for cross-reactivity. No significant cross-reactivity was observed.
Form/Format	Complete Kit
Sequence Length	622
Samples	Human plasma
Sensitivity	The minimum detectable dose (MDD) was determined by adding two standard deviations to the mean optical density value of twenty zero standard replicates (range OD450: 0.147-0.169) and calculating the corresponding concentration. The MDD was 0.166 ng/ml.
Intra-assay Precision	Three samples of known concentration were tested twenty times on one plate to assess intra-assay precision.
Inter-assay Precision	Three samples of known concentration were tested in ten independent assays to assess inter-assay precision.
Preparation and Storage	Store at 4 degree C. Shelf Life: 12 months from manufacture, see label for expiration date

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for F2 elisa kit	Intended Uses: This human prothrombin antigen assay is intended for the quantitative determination of total prothrombin antigen in human plasma. For research use only. Principle of the Assay: Human prothrombin will bind to the capture antibody coated on the microtiter plate. Prothrombin, thrombin, and thrombin-antithrombin complex will react with the antibody on the plate. After appropriate washing steps, anti-human prothrombin primary antibody binds to the captured protein. Excess primary antibody is washed away and bound antibody is reacted with the secondary antibody. Following an additional washing step, TMB substrate is used for color development at 450nm. A standard calibration curve is prepared along with the samples to be measured using dilutions of human prothrombin. Color development is proportional to the concentration of total prothrombin in the samples. Background: Prothrombin (aka Factor II) is a single-chain vitamin K-dependent 579 amino acid glycoprotein zymogen [1]. Prothrombin is proteolytically activated to thrombin by the prothrombinase enzyme complex in the coagulation cascade common pathway. The serine protease thrombin converts plasma fibrinogen to insoluble fibrin. Prothrombin levels are decreased by anticoagulant therapy, vitamin K deficiency and severe liver disease [2]. Elevated plasma prothrombin is associated with a single nucleotide change at position 20210 [3].
Product Categories/Family for F2 elisa kit	Thrombin/Prothrombin; Human Prothrombin ELISA Kits

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503635
NCBI GeneID	2147
NCBI Accession #	NP_000497.1
NCBI GenBank Nucleotide #	NM_000506.3
UniProt Accession #	P00734; Q4QZ40; Q53H04; Q53H06; Q7Z7P3; Q9UCA1; B2R7F7; B4E1A7
Molecular Weight	70,037 Da
NCBI Official Full Name	prothrombin preproprotein
NCBI Official Synonym Full Names	coagulation factor II (thrombin)
NCBI Official Symbol	F2
NCBI Official Synonym Symbols	PT; THPH1; RPRGL2
NCBI Protein Information	prothrombin; serine protease; prothrombin B-chain; prepro-coagulation factor II
UniProt Protein Name	Prothrombin
UniProt Gene Name	F2
UniProt Entry Name	THRB_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/f2-general-elisa-kits/prothrombin-total-antigen-assay/37734>