

General Prothrombin total antigen assay ELISA Kit | F2 elisa kit

Mouse Prothrombin total antigen assay ELISA Kit

CATALOG #
AAA37749

REACTIVITY
General

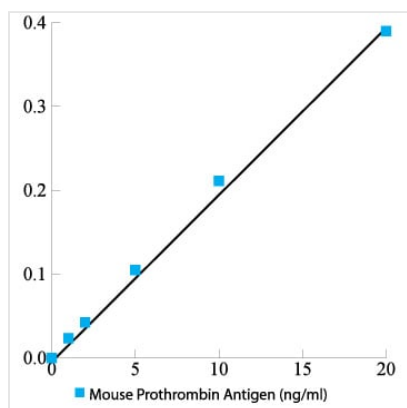
PRODUCT SYNONYMS

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

PRODUCT SPECIFICATIONS

Reactivity	General
Specificity	This assay recognizes natural mouse prothrombin, thrombin, and thrombin/antithrombin complex. Significant cross reaction is observed with pooled normal plasma from rat. Pooled normal plasma from human, porcine, rabbit, and sheep were assayed for cross-reactivity. No significant cross-reactivity was observed.
Form/Format	Complete Kit
Sequence Length	618
Samples	Mouse plasma, serum, tissue extracts, and cell culture media
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: 0.114-0.124) and calculating the corresponding concentration. The MDD was 0.319 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: 6 months from manufacture, see label for expiration date

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for F2 elisa kit	Intended Uses: This mouse prothrombin/thrombin total antigen assay is intended for the quantitative determination of total prothrombin and thrombin in mouse plasma, serum, tissue extracts, and cell culture media. For quantitation of mouse prothrombin only, refer to the Mouse Prothrombin Antigen Assay (cat # MPTKT). For research use only. Principle of the Assay: Mouse prothrombin, thrombin, and thrombin-antithrombin complex will bind to the capture antibody coated on the microtiter plate. After appropriate washing steps, biotinylated primary antibody binds to the captured protein. Excess primary antibody is washed away and bound antibody is reacted with horseradish peroxidase conjugated streptavidin. 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 prothrombin. The amount of color development is directly proportional to the concentration of prothrombin in the sample. 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; Mouse Prothrombin ELISA Kits

NCBI AND UNIPROT INFORMATION

NCBI GI #	6753798
NCBI GeneID	14061
NCBI Accession #	NP_034298.1
NCBI GenBank Nucleotide #	NM_010168.2
UniProt Accession #	P19221
Molecular Weight	70,269 Da
NCBI Official Full Name	prothrombin
NCBI Official Synonym Full Names	coagulation factor II
NCBI Official Symbol	F2
NCBI Official Synonym Symbols	Cf2; FII; Cf-2; thrombin
NCBI Protein Information	prothrombin
UniProt Protein Name	Prothrombin
UniProt Gene Name	F2
UniProt Synonym Gene Names	Cf2
UniProt Entry Name	THRB_MOUSE

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.