abcam

Product datasheet

Canine Fibrinogen ELISA Kit ab108839

1 Image

Overview

| Product name | Canine Fibrinogen ELISA Kit | | | | | |
|--------------------|---|---|------|----|-------------|--|
| Detection method | Colorimetric | | | | | |
| Precision | | | | | Intra-assay | |
| | Sample | n | Mean | SD | CV% | |
| | Overall | | | | 6.1% | |
| | Inter-assay | | | | | |
| | Sample | n | Mean | SD | CV% | |
| | Overall | | | | 10.3% | |
| Sample type | Urine | | | | | |
| Assay type | Sandwich (quantitative) | | | | | |
| Sensitivity | = 12 ng/ml | | | | | |
| Range | 12.5 ng/ml - 800 ng/ml | | | | | |
| Recovery | 97 % | | | | | |
| Assay time | 4h 0m | | | | | |
| Assay duration | Multiple steps standard assay | | | | | |
| Species reactivity | Reacts with: Dog | | | | | |
| Product overview | Abcam's Fibrinogen Canine <i>in vitro</i> ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of fibrinogen levels in urine samples. | | | | | |

A Fibrinogen specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently a Fibrinogen specific biotinylated detection antibody is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Complex 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 Fibrinogen captured in plate.

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

Platform

Microplate

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 M Concentrate | 1 x 20ml | |
| 20X Wash Buffer Concentrate | 2 x 30ml | |
| 60X Biotinylated Canine Fibrinogen Antibody | 1 x 75µl | |
| Chromogen Substrate | 1 x 7ml | |
| Fibrinogen Microplate (12 x 8 well strips) | 1 unit | |
| Fibrinogen Standard | 1 vial | |
| Sealing Tapes | 3 units | |
| Stop Solution | 1 x 11ml | |

Function

Fibrinogen has a double function: yielding monomers that polymerize into fibrin and acting as a cofactor in platelet aggregation.

Tissue specificity Plasma.

Involvement in disease

Defects in FGA are a cause of congenital afibrinogenemia (CAFBN) [MIM:202400]. This is a rare autosomal recessive disorder characterized by bleeding that varies from mild to severe and by complete absence or extremely low levels of plasma and platelet fibrinogen. Note=The majority of cases of afibrinogenemia are due to truncating mutations. Variations in position Arg-35 (the site of cleavage of fibrinopeptide a by thrombin) leads to alpha-dysfibrinogenemias.
Defects in FGA are a cause of amyloidosis type 8 (AMYL8) [MIM:105200]; also known as systemic non-neuropathic amyloidosis or Ostertag-type amyloidosis. AMYL8 is a hereditary generalized amyloidosis due to deposition of apolipoprotein A1, fibrinogen and lysozyme amyloids. Viscera are particularly affected. There is no involvement of the nervous system. Clinical features include renal amyloidosis resulting in nephrotic syndrome, arterial hypertension, hepatosplenomegaly, cholestasis, petechial skin rash.

Sequence similarities Contains 1 fibrinogen C-terminal domain.

Domain

Post-translational modifications

Forms F13A-mediated cross-links between a glutamine and the epsilon-amino group of a lysine

contributing a fourth strand to the coiled coil structure.

The alpha chain is not glycosylated.

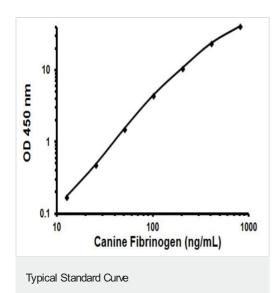
A long coiled coil structure formed by 3 polypeptide chains connects the central nodule to the Cterminal domains (distal nodules). The long C-terminal ends of the alpha chains fold back, residue, forming fibronectin-fibrinogen heteropolymers.

About one-third of the alpha chains in the molecules in blood were found to be phosphorylated. Conversion of fibrinogen to fibrin is triggered by thrombin, which cleaves fibrinopeptides A and B from alpha and beta chains, and thus exposes the N-terminal polymerization sites responsible for the formation of the soft clot. The soft clot is converted into the hard clot by factor XIIIA which catalyzes the epsilon-(gamma-glutamyl)lysine cross-linking between gamma chains (stronger) and between alpha chains (weaker) of different monomers. Phosphorylation sites are present in the extracellular medium.

Cellular localization

Secreted.

Images



Representative Standard Curve using ab108839

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