

Rat Fibronectin ELISA Kit ab108850

4 References 2 Images

Overview

Product name	Rat Fibronectin ELISA Kit			
Detection method	Colorimetric			
Precision	Intra-assay			
	Sample	n	Mean	SD
	Overall			CV%
				5.2%
	Inter-assay			
	Sample	n	Mean	SD
	Overall			CV%
				10.8%
Sample type	Cell culture supernatant, Urine, Serum, Plasma, Tissue, Cell Lysate			
Assay type	Sandwich (quantitative)			
Sensitivity	69 pg/ml			
Range	0.391 ng/ml - 6.25 ng/ml			
Recovery	98 %			
Assay time	4h 00m			
Assay duration	Multiple steps standard assay			
Species reactivity	Reacts with: Rat			
Product overview	Abcam's Fibronectin Rat <i>in vitro</i> ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of Fibronectin in plasma, serum, urine, and cell culture supernatants.			

A Fibronectin specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently a Fibronectin 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 Fibronectin 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 N Concentrate	1 x 30ml
20X Wash Buffer Concentrate	2 x 30ml
50X Biotinylated Rat Fibronectin Antibody	1 x 120µl
Chromogen Substrate	1 x 7ml
Rat Fibronectin Microplate (12 x 8 well strips)	1 unit
Rat Fibronectin Standard	1 vial
Sealing Tapes	3 units
Stop Solution	1 x 11ml

Function Fibronectins bind cell surfaces and various compounds including collagen, fibrin, heparin, DNA, and actin. Fibronectins are involved in cell adhesion, cell motility, opsonization, wound healing, and maintenance of cell shape. Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization. Participates in the regulation of type I collagen deposition by osteoblasts.

Anastellin binds fibronectin and induces fibril formation. This fibronectin polymer, named superfibronectin, exhibits enhanced adhesive properties. Both anastellin and superfibronectin inhibit tumor growth, angiogenesis and metastasis. Anastellin activates p38 MAPK and inhibits lysophospholipid signaling.

Tissue specificity Plasma FN (soluble dimeric form) is secreted by hepatocytes. Cellular FN (dimeric or cross-linked multimeric forms), made by fibroblasts, epithelial and other cell types, is deposited as fibrils in the extracellular matrix. Ugl-Y1, Ugl-Y2 and Ugl-Y3 are found in urine.

Involvement in disease Glomerulopathy with fibronectin deposits 2

Sequence similarities Contains 12 fibronectin type-I domains.
Contains 2 fibronectin type-II domains.
Contains 16 fibronectin type-III domains.

Developmental stage Ugl-Y1, Ugl-Y2 and Ugl-Y3 are present in the urine from 0 to 17 years of age.

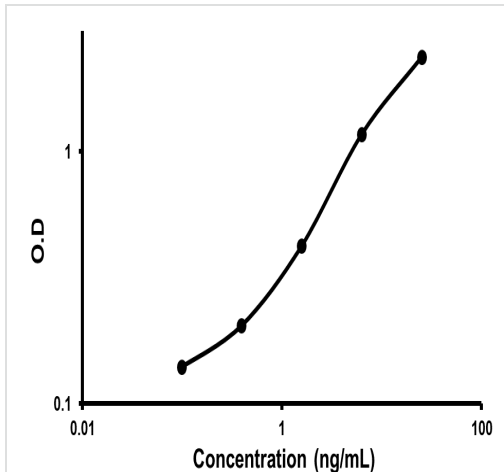
Post-translational modifications Sulfated.
It is not known whether both or only one of Thr-2064 and Thr-2065 are/is glycosylated.
Forms covalent cross-links mediated by a transglutaminase, such as F13A or TGM2, between a

glutamine and the epsilon-amino group of a lysine residue, forming homopolymers and heteropolymers (e.g. fibrinogen-fibronectin, collagen-fibronectin heteropolymers).
Phosphorylated by FAM20C in the extracellular medium.
Proteolytic processing produces the C-terminal NC1 peptide, anastellin.

Cellular localization

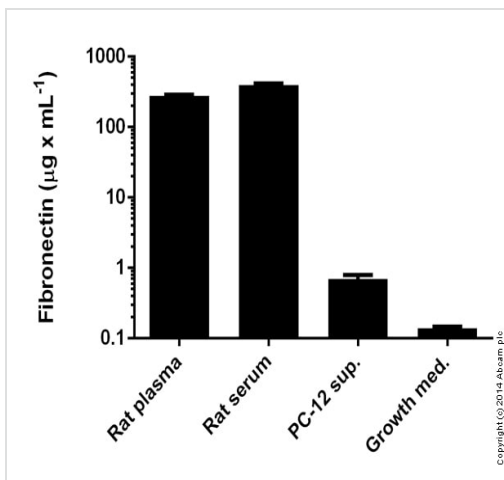
Secreted, extracellular space, extracellular matrix.

Images



Typical Standard Curve

Representative Standard Curve using ab108850.



Sandwich ELISA - Ab108850 Fibronectin Rat ELISA Kit

Fibronectin measured in various samples showing quantity (microgram) per mL of tested sample

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