

**Anti-Fibronectin (Human) (RABBIT) Antibody**  
**Fibronectin Antibody**  
**Catalog # ASR5159**

**Specification**

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**Anti-Fibronectin (Human) (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, IP, I, LCI
Application Note	Anti-Fibronectin antibodies have been used for indirect trapping ELISA for quantitation of antigen in serum using a standard curve, for immunoprecipitation and for western blotting for highly sensitive qualitative analysis. Rockland's anti-Fibronectin detects intact fibronectin (Invitrogen, Cat. No. 33016-015) by western blot after digestion by Matrix Metalloproteinase-3 (MMP-3) overnight at 37° C. Separation was performed using a 4-12% Tris-Glycine gel. Under these conditions a sizeable, dark band at ~220 kDa representing the undigested fibronectin, as well as many, smaller bands representing the variably sized fragments resulting from fibronectin digestion by MMP-3 were noted. For immunohistochemistry paraffin embedded tissue preparation is recommended.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Fibronectin was purified from Human plasma by binding to a denatured gelatin column followed by elution with high concentrations of arginine. The eluted material was further purified by gel filtration. Immunization occurred after single-band purity was assessed by SDS-PAGE.
Preservative	0.01% (w/v) Sodium Azide

**Anti-Fibronectin (Human) (RABBIT) Antibody - Additional Information**

**Gene ID 2335**

**Other Names**

2335

**Purity**

This product has been prepared by immunoaffinity chromatography using immobilized antigens followed by extensive cross-adsorption against human serum proteins and collagen and non-collagen extracellular matrix proteins to remove any unwanted specificities. Typically less than 1% cross reactivity against other extracellular matrix proteins was detected by ELISA against purified standards. This antibody reacts with human Fibronectin and has negligible cross-reactivity with Type I, II, III, IV, V or VI Collagens or Laminin. Non-specific cross reaction of anti-Fibronectin antibodies with other human serum proteins or non-Fibronectin extracellular matrix proteins is negligible.

**Storage Condition**

Store vial at 4° C prior to opening. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage mix with an equal volume of glycerol, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

**Anti-Fibronectin (Human) (RABBIT) Antibody - Protein Information**

Name FN1 ([HGNC:3778](#))

**Synonyms FN****Function**

Fibronectins bind cell surfaces and various compounds including collagen, fibrin, heparin, DNA, and actin (PubMed:[3024962](http://www.uniprot.org/citations/3024962), PubMed:[3593230](http://www.uniprot.org/citations/3593230), PubMed:[3900070](http://www.uniprot.org/citations/3900070), PubMed:[7989369](http://www.uniprot.org/citations/7989369)). Fibronectins are involved in cell adhesion, cell motility, opsonization, wound healing, and maintenance of cell shape (PubMed:[3024962](http://www.uniprot.org/citations/3024962), PubMed:[3593230](http://www.uniprot.org/citations/3593230), PubMed:[3900070](http://www.uniprot.org/citations/3900070), PubMed:[7989369](http://www.uniprot.org/citations/7989369)). Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization (By similarity). Participates in the regulation of type I collagen deposition by osteoblasts (By similarity). Acts as a ligand for the LILRB4 receptor, inhibiting FCGR1A/CD64-mediated monocyte activation (PubMed:[34089617](http://www.uniprot.org/citations/34089617)).

**Cellular Location**

Secreted, extracellular space, extracellular matrix. Secreted {ECO:0000250|UniProtKB:P11276}

**Tissue Location**

Expressed in the inner limiting membrane and around blood vessels in the retina (at protein level) (PubMed:29777959) 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 (PubMed:17614963).

## **Anti-Fibronectin (Human) (RABBIT) Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **Anti-Fibronectin (Human) (RABBIT) Antibody - Images**

## **Anti-Fibronectin (Human) (RABBIT) Antibody - Background**

Human fibronectin has a molecular weight of 450,000 daltons when purified in an intact form from plasma. Fibronectin is a glycoprotein synthesized in the liver for the circulating blood plasma form, and is synthesized by many mesenchymal cells, for the extracellular matrix form. It is composed of two similar, but not identical protein chains, which are linked by two disulfide linkages at the C-terminal end of the chains. The chains are composed of domains which have specific secondary structures linked together by regions which are especially susceptible to proteolytic action. For this reason, detection by immunoblot (western) may show considerable variability in the observed apparent molecular weights, which is predicated on the source of the fibronectin, and to what degree proteolysis has occurred. Bands approximately 225 kDa should be observed after SDS-PAGE when reducing and denaturing conditions are used.