

Anti-Fibronectin (RABBIT) Antibody Biotin Conjugated Fibronectin Antibody Biotin Conjugated Catalog # ASR5856

# **Specification**

# Anti-Fibronectin (RABBIT) Antibody Biotin Conjugated - Product Information

Host Conjugate FP Value Target Species Reactivity Clonality Application Application Note	Rabbit Biotin 10-20 Human Rat, Human, Mouse, Monkey, Bovine Polyclonal WB, IHC, E, IP, I, LCI Anti-Fibronectin (rabbit) antibody was tested by WB, ELISA, and IHC. Assay by immunoblot was found to be reactive against Fibronectin at a dilution of 1:5,000 to 1:10,000. Assay against 1.0 µg of Fibronectin in a standard capture ELISA using Peroxidase Conjugated Streptavidin #S000-03 and ABTS (2,2'-azino-bis-[3-ethyl benthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:4,000 to 1:8,000 of the stock concentration is suggested for this product. For immunohistochemistry on paraffin embedded tissue dilute the product 1:50 to 1:200.
Physical State Buffer	Lyophilized 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.
Reconstitution Volume Reconstitution Buffer	100 μL Restore with deionized water (or
Stabilizer	equivalent) 10 mg/mL Bovine Serum Albumin (BSA) -
Preservative	Immunoglobulin and Protease free 0.01% (w/v) Sodium Azide

# Anti-Fibronectin (RABBIT) Antibody Biotin Conjugated - Additional Information

Gene ID 2335



Other Names 2335

### **Purity**

Anti-fibronectin (rabbit) antibody 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 specificity. 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 restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

### **Precautions Note**

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

# Anti-Fibronectin (RABBIT) Antibody Biotin Conjugated - Protein Information

### Name FN1 (HGNC:3778)

Synonyms FN

### Function

Fibronectins bind cell surfaces and various compounds including collagen, fibrin, heparin, DNA, and actin (PubMed:<a href="http://www.uniprot.org/citations/3024962"

target="\_blank">3024962</a>, PubMed:<a href="http://www.uniprot.org/citations/3593230" target="\_blank">3593230</a>, PubMed:<a href="http://www.uniprot.org/citations/3900070" target="\_blank">3900070</a>, PubMed:<a href="http://www.uniprot.org/citations/7989369" target="\_blank">7989369</a>). Fibronectins are involved in cell adhesion, cell motility, opsonization, wound healing, and maintenance of cell shape (PubMed:<a

href="http://www.uniprot.org/citations/3024962" target="\_blank">3024962</a>, PubMed:<a href="http://www.uniprot.org/citations/3593230" target="\_blank">3593230</a>, PubMed:<a href="http://www.uniprot.org/citations/3900070" target="\_blank">3900070</a>, PubMed:<a href="http://www.uniprot.org/citations/3900070" target="\_blank">3900070</a>, PubMed:<a href="http://www.uniprot.org/citations/7989369" target="\_blank">7989369</a>). 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:<a

href="http://www.uniprot.org/citations/34089617" target="\_blank">34089617</a>).

### **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 (RABBIT) Antibody Biotin Conjugated - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Anti-Fibronectin (RABBIT) Antibody Biotin Conjugated - Images



Immunohistochemistry with rabbit anti fibronectin biotin conjugated at 20X with negative controls (right). Tissue: kidney. Fixation: FFPE buffered formalin 10% conc. Antigen retrieval: Heat, Citrate pH 6.2. Pressure Cooker (top) or EDTA pH 9.5 Pressure Cooker (bottom). Primary antibody: 2ug/ml for 1 hour @ room T. Secondary antibody: Streptav. Conj. HRP 10 ug/ml circa 45 min. @ room T. Staining: antibody as precipitated red signal with a hematoxylin purple nuclear counterstain.

# Anti-Fibronectin (RABBIT) Antibody Biotin Conjugated - Background

Fibronectin antibody reacts with human fibronectin in liver, tonsil, skin and kidney. Traces of contaminating antibodies have been removed by solid-phase absorption. Biotin is ammenable to conjugation to proteins for use in biochemical assays. Biotin has a very strong affinity for avidin and streptavidin; an attraction that is the strongest and most stable non-covalent interaction known.

Fibronectin is found in two forms in vertebrates: soluble and insoluble. Soluble plasma fibronectin is contained in blood plasma and constitutes a large protein component. Insoluble cellular fibronectin is a large component of the extra-cellular matrix where it is secreted by many different types of cells. Fibronectin plays a large role in wound healing and cell development.

Anti-fibronectin (rabbit) antibody is ideal for investigators in Cardiology, Cell Biology, Microbiology, and Immunology research.