Anti-Fibronectin antibody ab23751

Overview

Product name: Anti-Fibronectin antibody
Description: Rabbit polyclonal to Fibronectin
Host species: Rabbit
Specificity: Fibronectin 100%, collagen type I, III and IV <0.1%, elastin <0.1%

Tested applications:
Suitable for: ELISA, IHC-P, RIA, ICC/IF
Reacts with: Rat, Human, Pig

Immunogen:
Full length native protein (purified) corresponding to Rat Fibronectin.

Positive control:
Rat skin

General notes:
This antibody may be used to identify fibronectin during wound healing, during tumour progression, and tumour invasion respectively.

Properties

Form: Liquid
Storage instructions:
Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer:
 Constituent: PBS
Purity: Affinity purified

Primary antibody notes:
This antibody may be used to identify fibronectin during wound healing, during tumour progression, and tumour invasion respectively.

Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab23751 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
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.

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<td>ELISA</td>
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<td>Use at an assay dependent concentration.</td>
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<td>IHC-P</td>
<td>★★★★★</td>
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<tr>
<td>RIA</td>
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<td>1/5000.</td>
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<tr>
<td>ICC/IF</td>
<td>★★★★★</td>
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Target

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Images
Immunocytochemistry/Immunofluorescence - Anti-Fibronectin antibody (ab23751)

This image is courtesy of an Abreview submitted by Dr Mal Niladri

ab23751 at 1/200 dilution staining pig fibroblast cells by ICC/IF. The cells were paraformaldehyde fixed and blocked with serum prior to incubation with antibody for 8 hours at 4°C. An Alexa-Fluor ® 488 conjugated donkey anti-rabbit antibody was used as the secondary. The image was taken using a confocal laser scanning microscope and shows the presence of abundant fibronectin (green) in the pig fibroblasts. DAPI was used as nuclear counterstain (Blue).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibronectin antibody (ab23751)

This image is courtesy of an anonymous Abreview

ab23751 staining rat intestine tissue section by immunohistochemistry (Formalin/PFA-fixed, paraffin-embedded sections). Tissue underwent fixation in Bouins solution and processed by enzyme mediated antigen retrieval method. The primary antibody was diluted 1/500 and incubated with sample for 1 hour at 20°C. A HRP-conjugated mouse polyclonal to rabbit IgG was used undiluted as the secondary.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibronectin antibody (ab23751)

This image is courtesy of an anonymous Abreview

ab23751 staining Fibronectin in Rat blood vessel tissue sections by IHC-P (formaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 100% DEEB block for 10 minutes at room temperature. Enzymatic antigen retrieval was performed. Samples were incubated with primary antibody (1/1000) for 20 minutes at room temperature. An undiluted HRP-conjugated goat anti-rabbit IgG polyclonal was used as the secondary antibody.

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