# abcam

# Product datasheet

# Recombinant Human Fibronectin protein (His tag) ab276244

# 1 Image

**Description** 

Product name Recombinant Human Fibronectin protein (His tag)

Purity > 95 % SDS-PAGE.

Endotoxin level< 1.000 Eu/μg</th>Expression systemHEK 293 cellsAccessionP02751-15

Protein length Protein fragment

Animal free No

Nature Recombinant

**Species** Human

**Sequence** NIDRPKGLAF TDVDVDSIKI AWESPQGQVS

RYRVTYSSPE DGIHELFPAP DGEEDTAELQ GLRPGSEYTV SVVALHDDME SQPLIGTQST

Predicted molecular weight 11 kDa including tags

**Molecular weight information** The recombinant human FN1 consists of 101 amino acids and predicts a molecular mass of 11.3

kDa.

Amino acids 1722 to 1811

Tags His tag C-Terminus

Additional sequence information Predicted N-terminus: Asn 1722.

#### **Specifications**

Our **Abpromise guarantee** covers the use of **ab276244** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE

Form Lyophilized

#### **Preparation and Storage**

Stability and Storage Shipped at Room Temperature. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze /

thaw cycle.

pH: 7.40

Constituent: 100% PBS

**Reconstitution** This information is lot specific. Please contact our technical Support team for details.

#### **General Info**

**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 Sulfated.

modifications 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

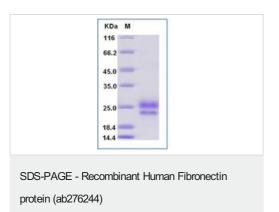
glutamine and the epsilon-amino group of a lysine residue, forming homopolymers and heteropolymers (e.g. fibrinogen-fibronectin, collagen-fibronectin heteropolymers).

Phosphorylated by FAM20C in the extracellular medium.

Proteolytic processing produces the C-terminal NC1 peptide, anastellin.

**Cellular localization** Secreted, extracellular space, extracellular matrix.

#### **Images**



SDS-PAGE analysis of ab276244

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