Product datasheet

Recombinant Human Fibronectin protein ab169892

Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Recombinant Human Fibronectin protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein length</td>
<td>Protein fragment</td>
</tr>
</tbody>
</table>

Description

<table>
<thead>
<tr>
<th>Nature</th>
<th>Recombinant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Escherichia coli</td>
</tr>
<tr>
<td>Amino Acid Sequence</td>
<td></td>
</tr>
<tr>
<td>Accession</td>
<td>P02751</td>
</tr>
<tr>
<td>Species</td>
<td>Human</td>
</tr>
<tr>
<td>Sequence</td>
<td>MASMTGGQQMGRGHYHNNLHGTYFQGEFPGLVPPYNTEVTETTMTIWTPAPRIGFKLGVLPQGEAQPQVTSDDGSIVVSGLTPGVEYFTIQLKDGQERDAIPINPMKVT</td>
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<tr>
<td>Molecular weight</td>
<td>12 kDa including tags</td>
</tr>
<tr>
<td>Amino acids</td>
<td>1087 to 1172</td>
</tr>
<tr>
<td>Tags</td>
<td>His-T7 tag N-Terminus</td>
</tr>
</tbody>
</table>

Specifications

Our Abpromise guarantee covers the use of ab169892 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             |

Purity

> 90 % SDS-PAGE.

ab169892 was expressed in E.coli as inclusion bodies. The final product was refolded and chromatographically purified.

Form

Liquid

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00
Constituent: 0.32% Tris HCl
Note: Contains NaCl, KCl, EDTA, arginine, DTT and glycerol.

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 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.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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