

Recombinant Human Fibronectin Fragment 2

Catalog Number: 10314-H08H

General Information

Gene Name Synonym:

FN, CIG, FNZ, MSF, ED-B, FINC, GFND, LETS, DKFZp686H0342, DKFZp686I1370, DKFZp686F10164, DKFZp686O13149

Protein Construction:

A DNA sequence encoding the Fragment 2 (Ser 607 - Pro 1265) of human Fibronectin (CAD91166) was expressed with a C-terminal polyhistidine tag

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio-activity:

Measured by its binding ability in a functional ELISA

Immobilized mouse APCS at 10 µg/ml (100 µl/well) can bind biotinylated Fibronectin Fragment 2 with a linear ranger of 0.625 - 5 µg/ml

Endotoxin:

< 1.0 EU per µg protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Ser 607

Molecular Mass:

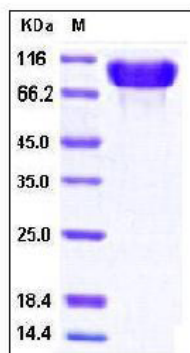
The secreted recombinant human Fibronectin 1 fragment 2 (FN1.2) consists of 670 amino acids and has a calculated molecular mass of 73.2 kDa. As a result of glycosylation, rh FN1.2 migrates as an approximately 85-100 kDa band in SDS-PAGE under reducing conditions

Formulation:

Lyophilized from sterile PBS , pH 7.2

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

SDS-PAGE:



Usage Guide

Storage:

Store it under sterile conditions at -70°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Fibronectin (FN) is a large glycoprotein present as soluble disulfide-linked dimeric form in plasma and body fluids, and as dimeric or multimeric form at the cell surface or in extracellular matrix (ECM). Each monomer of FN consists of three types of homologous repeating units, that is 12 type I repeats, two type II repeats and 15-17 type III repeats. The occurrence of multiple isoforms results from alternative mRNA splicing of the ED-A, ED-B and III-CS regions, and subsequent post-translational modification. As an ECM component and one of the primary cell adhesion molecules, Fibronectin can be a ligand for fibrin, heparin, chondroitin sulfate, collagen/gelatin, as well as many integrin receptors through which FN mediates the variety of cellular signaling pathways. Accordingly, Fibronectin is involved in cell adhesion and migration, growth and differentiation, morphogenesis, wound healing, blood coagulation, host defense, and metastasis. Conversion of the non-functional soluble fibronectin to fibronectin fibrils requires conformational changes and exposure of cryptic epitopes necessary for polymerization. The fragment 2 of FN comprises the first 7 FN type III repeats and is suggested to be important for self association during fibril growth via the key module III₂

References

1. Magnus, K. et al., 1998, Arterioscler. Thromb. Vasc. Biol. 18: 1363-70.
2. Sechler, J.L. et al., 2001, J. Cell Biol. 154:1081-1088.
3. Williams, C.M. et al., 2008, Cancer. Res. 68:3185-3192.
4. Rounmen, P. et al., 2002, J. Cell. Sci. 115: 3861-3863.