

Product Information

Fibronectin Proteolytic Fragment, 30 kDa from human plasma

Catalog Number **F9911**

Storage Temperature -20°C

Product Description

Fibronectins are high molecular mass glycoproteins having two subunits with molecular masses in the range of 220–250 kDa. The subunits are joined by disulfide bonds to form the dimer. Fibronectin has an acidic isoelectric point ($\text{pI} = 5.5\text{--}6.0$).

Fibronectin fragments are obtained from plasma fibronectin by using proteolytic enzymes. These fragments are useful tools for mapping regions within the fibronectin molecule, which are responsible for specific binding to collagen and for other biologically relevant functions. The N-terminal 70 kDa fragment (Catalog Number F0287) is obtained by Cathepsin D digestion. This fragment binds to both gelatin and heparin. Tryptic digestion of this 70 kDa fragment yields two peptides: the N-terminal 30 kDa heparin binding fragment (Catalog Number F9911) and a 45 kDa gelatin binding fragment (Catalog Number F0162).

Fibronectin proteolytic fragment 30 kDa, the heparin binding fragment, is the N-terminus of fibronectin. This fragment has a basic pI (8.2–8.6) and is free of carbohydrate moieties. The fragment is rich in cystine residues, but has no free sulfhydryl groups. The amino acid sequence of this domain is composed of five disulfide-bonded loops. This fragment binds to heparin, fibrin, and collagen. The primary physiological role of this domain appears to be the binding of fibrin.

The product is lyophilized from phosphate buffered saline with sucrose as a cryoprotectant.

Purity: $>90\%$ (SDS-PAGE)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Plasma from each donor has been tested and found negative for antibody to HIV, HCV, and HBsAg.

Preparation Instructions

The product is soluble in water (0.5 mg/ml), yielding a clear to slightly hazy solution.

Storage/Stability

It is recommended to store the product at -20°C . The lyophilized powder should remain active for at least 3 years when stored at -20°C .

References

1. Hynes, R.O., Fibronectins. in Springer Series in Molecular Biology, Springer-Verlag Inc. (New York: 1990).
2. Negre, E., et al., J. Biol. Chem., **269**, 22039-22045 (1994).

JF,GY,TA,MAM 05/09-1

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