# Recombinant Human NovoNectin

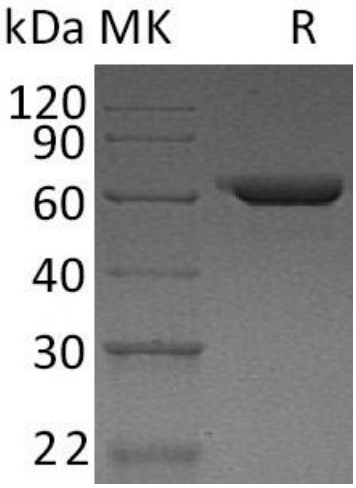
# Catalog No.: RP0029

## Basic Information

| Information | |
|---|---|
| **Source** | *E.coli* |
| **Description** | Recombinant Human Fibronectin Fragment is produced by our E.coli expression system and the target gene encoding Pro1270-Ser1546&Ala1721-Thr2016 is expressed. |
| **Accession** | P02751 |
| Known As | NovoNectin; Fibronectin; FN; Cold-insoluble globulin; CIG; FN; Fibronectin 1 |
| **Predicted Mol Mass** | 62.7 KDa |
| **Apparent Mol Mass** | 60-80 KDa, reducing conditions |
| **Properties** | |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution of 12.5 mM Citric acid, 1.25% Sucrose, 0.1% Tween80, pH 5.5 . |
| **Storage** | Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt.<br>Reconstituted protein solution can be stored at 2-8°C for 2-7 days.<br>Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months. |
| **Endotoxin** | < 0.01 EU/μg as determined by LAL test. |
| **Reconstitution** | Always centrifuge tubes before opening.Do not mix by vortex or pipetting.<br>It is not recommended to reconstitute to a concentration less than 100μg/ml.<br>Dissolve the lyophilized protein in distilled water.<br>Please aliquot the reconstituted solution to minimize freeze-thaw cycles. |
| **Shipping** | The product is shipped at ambient temperature.<br>Upon receipt, store it immediately at the temperature listed below. |

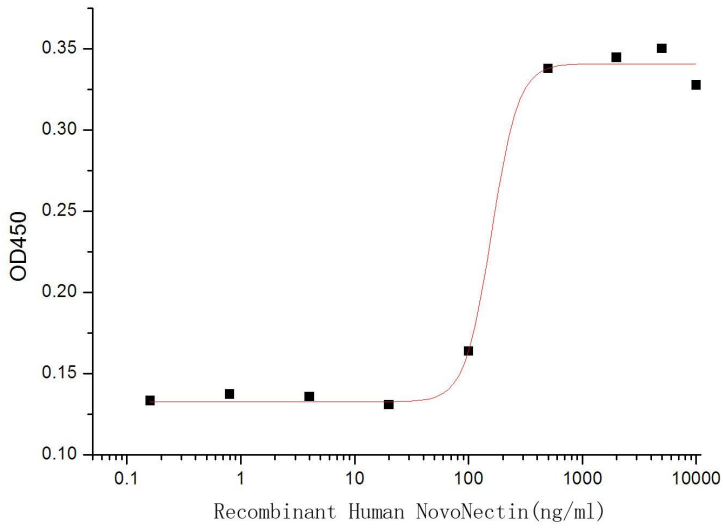
# Experimental Data

## Purity-SDS-PAGE




Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

## Bioactivity-Cell Based Assay




Measured by its ability to support cell attachment and spreading when used as a substratum for cell culture. The ED50 for this effect is 0.1-0.5 μg/ml.

# Background

Fibronectin1(FN1) is a secreted protein and contains 12 fibronectin type-I domains,fibronectin type-II domains and 16 fibronectin type-III domains.Recombinant human fibronectin fragment, is a protein of ~63 kDa containing a central cell-binding domain, a high affinity heparin-binding domain II,and CS1 site within the alternatively spliced III CS region of human fibronectin. Cells bind to a VLA-4 ligand, a CS-I site, and a VLA-5 ligand, a cell attachment domain, and virus vectors binds to a heparin binding domain II, which co-locates the cell and the virus vector on NovoNectin. This process enhances the density of both cells and vectors, and facilitates the gene transduction in the result.