

# **Recombinant Human Fibronectin (TBS8203)**

# **Product Information**

Catalog Number	<b>Unit Size</b>	Concentration	Endotoxin	Storage
TBS8203-0.5	0.5 mg	2mg/mL	$<1$ EU/ $\mu g$	-20°C
TBS8203-2	2.0 mg	2mg/mL	<1 EU/µg	-20°C

### **Description**

Recombinant Human Fibronectin (rHFN) is composed of three functional domains: cell-binding domain (C-domain), heparin-binding domain (H-domain), and CS-1 sequence. It is mainly involved in some physiological activities such as cell adhesion, growth, differentiation, and proliferation. It has been widely used to enhance retroviral and lentiviral gene transfer methods into mammalian cells. Fibronectin enhances retroviral-mediated gene transduction by aiding the colocalization of target cells and virions. Specifically, virus particles bind the Fibronectin via interaction with the H-domain, and target cells bind mainly through the interaction of cell surface integrin receptor VLA-5 and VLA-4 with the fibronectin C-domain and CS-1 site, respectively. Through facilitating proximity, it can enhance retroviral-mediated gene transfer to target cells expressing integrin receptors VLA-4 and/or VLA-5, which can improve gene transfection efficiency of 30 to 70%. In addition, this item enhances the proliferation of T lymphocytes. This rHFN is purified in E. coli and has a molecular mass of 66 kDa.

### **Molecular Mass**

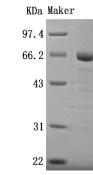
66 kDa, as shown in the figure below.

#### **Product Features**

- 1) Shorten the cultivate time for cells and enhance killing activity.
- 2) Stimulate lymphocytes proliferate.
- 3) Enhance retroviral-mediated gene transfer to hematopoietic stem cells.
- 4) Reduce blood volume to lower the costs.

# **Reconstitution Recommendation**

It is recommended to dilute to a suitable working concentration in PBS. For Plate coating:  $20-100 \mu g/ml$  rHF reagent can cover plates at  $4-20 \mu g/cm2$ .



**Figure1.** The purity of recombinant human fibronectin.

# **Storage Conditions:**

Upon reconstitution the material should be aliquoted and frozen at -20 °C to -70°C. Avoid repeated freeze/thaw cycles.

### **Related Products**

ESC/iPSC qualified FBS (TBS8002) 0.1% Gelatin Solution (TBS8004) Horse Serum (TBS8007) PBMC qualified FBS (TBS8015) PBMC Freezing Medium (TBS8016) 1XDPBS (TBS5027, Sterile) RPMI-1640 (TBS8063)

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