

Recombinant Human Fibronectin (FN) Protein

Catalog Number: GMP-TL903

Product Name

Generic Name	Recombinant Human Fibronectin (FN) Protein
Synonym	Cold-insoluble globulin

Product Information

Protein sequence	A DNA sequence encoding the human Fibronectin (P02751) was expressed with a His-tag at the N-terminus.
Expression Host	E. coli
QC Testing Purity	> 90 % as determined by SDS-PAGE
Activity	By measuring the adhesion capacity of NIH-3T3 mouse embryonic fibroblasts. When cells are added to the FN coated well plate (2.5µg/mL and 100µL/well), about 35%~60% of the cells will be specifically attached after 35 minutes at 37°C
Endotoxin level	< 0.1 EU per 1 µg of the protein as determined by the LAL method.
Molecular Mass	The Recombinant Human Fibronectin Protein predicts a molecular mass of 64.7 kD.
Formulation	Supplied as a 0.22µm filtered solution in PBS, PH 7.4.
Stability & Storage	24 months at 2 °C to 8 °C. Avoid repeated freeze-thaw cycles.

Background

Recombinant Human Fibronectin (FN) Protein, including three functional regions (cell binding domain, heparin binding domain, and CS1 site), can significantly enhance retrovirus mediated gene transfer to mammalian cells. This effect may be due to colocalization of retroviral particles and target cells on rhFN CH-296 chimeric molecule via retroviral particles or heparin binding region II binding to cell adhesion sites VLA-4 and/or VLA-5. According to the research results of Hannenberg *et al.*, there is typically 50% to 75% gene transduction of cells with the coating method.

References

- Williams CM, Engler AJ, Slone RD, Galante LL, Schwarzbauer JE (2008) Fibronectin expression modulates mammary epithelial cell proliferation during acinar differentiation. *Cancer Research* 68 (9): 3185–3192.
- Mao Y, Schwarzbauer JE (2005) Fibronectin fibrillogenesis, a cell-mediated matrix assembly process. *Matrix Biology: Journal of the International Society for Matrix Biology* 24 (6): 389–399.
- Erickson HP (2002) Stretching fibronectin. *Journal of Muscle Research and Cell Motility* 23 (5-6): 575–580.