Recombinant Human Fibronectin（FN）Protein

Size / Cat.No.: 50μg / GMP-TL903-0050
250μg / GMP-TL903-0250

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	Measured by its ability to support hiPS cell adhesion. The ED_{50} for this effect is ≤ 3.2 μg/mL.
Endotoxin	< 0.1EU 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	Lyophilized preparation can be stored 24 months at -20℃. 6 months at -20℃ under sterile conditions after reconstitution. 12 months at -80℃ under sterile conditions after reconstitution. Recommend to aliquot the protein into smaller quantities after reconstituting with water for injection, normal saline or PBS, and keep the diluted concentration above 100μg/mL.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

1. 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.
2. 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. 3. Erickson HP (2002) Stretching fibronectin. Journal of Muscle Research and Cell Motility 23 (5-6):575–580.