

**FGF-2/bFGF/FGF-b (Q65I, C96S, N111G), Human, Recombinant**

Cat. No. : PCK006

**General Information**

<b>Synonyms</b>	Fibroblast Growth Factor 2;FGF-2;Basic fibroblast Growth Factor;bFGF;Heparin-binding Growth Factor 2;HBGF-2;FGF2;FGFB
<b>Species</b>	Human
<b>Expression host</b>	E.coli
<b>Sequence</b>	Met1-Ser155
<b>Accession</b>	BAG70264.1
<b>Mol mass</b>	17.2 kDa
<b>Expiration date</b>	12 months

**Product feature**

<b>Purity</b>	> 95% as determined by reducing SDS-PAGE.
<b>Endotoxin (EU/μg)</b>	< 0.1
<b>Storage</b>	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
<b>Shipping</b>	Ice bag
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of 20 mM Tris, 5% sucrose, 0.02% Tween 80, pH 8.0.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Background**

Fibroblast Growth Factors (FGF) are a family of heparin-binding secreted Proteins that stimulate cell proliferation and differentiation in a wide variety of tissues. FGFs play important roles in diverse biological functions both in vivo and in vitro, including mitogenesis, cellular migration, differentiation, angiogenesis, and wound healing. Human embryonic stem cell (hESC) cultures require FGF basic (also known as FGF-2 or bFGF) in cell culture media to remain in an undifferentiated and pluripotent state. Thermostable FGF basic was engineered for enhanced stability in culture media, without modification of its biological function. FGF basic is a required component of stem cell culture media for maintaining cells in an undifferentiated state. Because FGF basic is unstable, daily media changes are needed. The thermostable FGF basic that supports a 2-day media change schedule, so no media changes are required over a weekend. This thermostable FGF basic was more stable than FGF basic in biochemical studies, and maintained cell growth, pluripotency and differentiation potential with a 2-day feeding schedule.