FGF-2/bFGF/FGF-b (K128N), Human, Recombinant

Cat. No. : PCK005

General Information

Synonyms	Fibroblast growth factor 2;FGF-2;Basic fibroblast growth factor;bFGF;Heparin-binding growth factor 2;HBGF-2;FGF2;FGFB
Species	Human
Expression host	E.coli
Sequence	Met1-Ser155
Accession	BAG70135.1
Mol mass	17.2kDa
Expiration date	6 months
Bio activity	Measured in a cell proliferation assay using BALB/c 3T3 cells. The ED50 for this effect is 0.75 ng/mL.

Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Store at ≤-5~-20°C, stable for 6 months after receipt. Store at ≤-5~-20°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Shipping	Ice bag
Formulation	Supplied as a 0.2 μm filtered solution of 20 mM Citrate, 10% Trehalose, 150 mM NaCl, 0.04% PS80, 0.5 mM EDTA, pH 5.5.

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.