Recombinant Human FGF-2/FGF basic/FGFb Protein

Catalog Number: PKSH033503

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

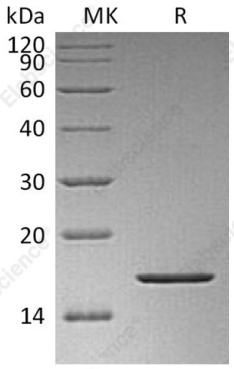
Description

Species	Human
Source	E.coli-derived Human FGF-2/FGF basic/FGFb protein Met1-Ser155
Calculated MW	17.2 kDa
Observed MW	17 kDa
Accession	BAG70135.1
Bio-activity	Measured in a cell proliferation assay using BALB/c 3T3 cells.The ED_{50} for this effect is 0.75 ng/ml.

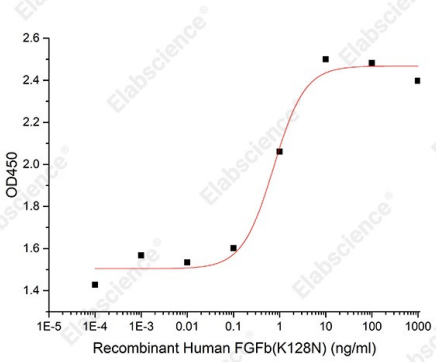
Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/ gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as a 0.2 μm filtered solution of 20mM Citrate,10% Trehalose,150mM NaCl, 0.04% PS80,0.5mM EDTA,pH 5.5.

Data



> 95 % as determined by reducing SDS-PAGE.



Measured in a cell proliferation assay using BALB/c 3T3 cells.The ED50 for this effect is 0.75 ng/ml.

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.