

Recombinant Human FGF-2/FGF basic/FGFb Protein (aa 1-155) (Q65I,C96S,N111G)

Catalog Number: PKSH033502

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

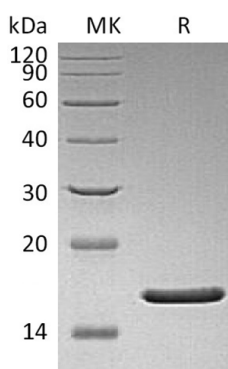
Description

Species	Human
Source	E.coli-derived Human FGF-2/FGF basic/FGFb protein Met1-Ser155
Calculated MW	17.2 kDa
Observed MW	16 kDa
Accession	BAG70264.1
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM Tris, 5% sucrose, 0.02% Tween 80, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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.