

Product datasheet for TP728199M

OriGene Technologies, Inc.

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Recombinant FGF-2 (aa 135-288) (Fibroblast growth factor-basic), Human

Product data:

Product Type: Recombinant Proteins

Description: Recombinant FGF-2 (aa 135-288) (Fibroblast growth factor-basic), Human

Species: Human **Expression Host:** E. coli

Expression cDNA Clone

AAGSITTLPALPEDGGSGAFPPGHFKDPKRLYCKNGGFFLRIHPDGRVDGVREKSDPHIKLQLQAEERGVV or AA Sequence: SIKGVCANRYLAMKEDGRLLASKCVTDECFFFERLESNNYNTYRSRKYTSWYVALKRTGQYKLGSKTGPGQ

KAILFLPMSAKS with polyhistidine tag at the N-terminus.

His Tag (N-term) Tag:

Predicted MW: The protein has a calculated MW of 18.1 kDa. The protein migrates as 17 kDa under reducing

condition (SDS-PAGE analysis).

>98% as determined by SDS-PAGE. **Purity:**

Buffer: The protein was lyophilized from a 0.2 µm filtered solution containing 0.01% sarkosyl in 1X

PBS, pH 8.0.

Measure by its ability to induce 3T3 cells proliferation. The ED₅₀ for this effect is <1 ng/mL. The **Bioactivity:**

specific activity of recombinant human FGF-2 is approximately >5 x 10⁵ IU/mg.

Endotoxin: <0.1 EU per 1 µg of the protein by the LAL method.

Reconstitution Method: Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

> lyophilized protein in sterile H₂O to a concentration not less than 100 μg/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Cell culture Applications:

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

> 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: P09038

Synonyms: HBGF-2, Prostatropin







Summary:

Basic fibroblast Growth Factors (FGF-2, bFGF, FGF- β), a 18 kDa pleiotropic cytokine, plays multiple roles in different cells and tissues. FGF-2 can stimulate smooth muscle cell growth, wound healing, and tissue repair. In addition, FGF-2 has been shown to regulate the generation of neurons and astrocytes from progenitor cells. FGF-2 are also involved in a variety of biological processes, including embryonic development, morphogenesis, tissue repair, tumor growth, and invasion. As a multifunctional cytokine, FGF-2 is first isolated from the pituitary. Later, it was identified from various cell types including cardiac myocytes, cardiac fibroblasts, endothelial cells, and smooth muscle cells.