

Product datasheet for TP728318M

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Recombinant FGF-2 (Fibroblast growth factor-basic), Mouse

Product data:

Product Type: Recombinant Proteins

Description: Recombinant FGF-2 (Fibroblast growth factor-basic), Mouse

Species: Mouse Expression Host: E. coli

Expression cDNA Clone

or AA Sequence:

ALPEDGGAAFPPGHFKDPKRLYCKNGGFFLRIHPDGRVDGVREKSDPHVKLQLQAEERGVVSIKGVCANR YLAMKEDGRLLASKCVTEECFFFERLESNNYNTYRSRKYSSWYVALKRTGQYKLGSKTGPGQKAILFLPMSA

KS with polyhistidine tag at the N-terminus.

Tag: His Tag (N-term)

Predicted MW: The protein has a calculated MW of 17.2 kDa. The protein migrates as 19 kDa under reducing

condition (SDS-PAGE analysis).

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

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

PBS, pH 8.0.

Bioactivity: Measure by its ability to induce 3T3 cells proliferation. The ED₅₀ for this effect is <1.5 ng/mL.

The specific activity of recombinant mouse FGF-2 is approximately $>1 \times 10^6$ 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 H_2O to a concentration not less than 100 μ g/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.

Applications: Cell culture

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: P15655

Synonyms: HBGF-2, Prostatropin







Summary:

Basic fibroblast Growth Factors (FGF-2, bFGF), a 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.