

Recombinant Mouse Fibroblast Growth Factor 2

Cat. No. Fgf2-664M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant mouse Fgf2 is a disulfide-linked homodimeric protein consisting of 146 amino acid residue subunits, and migrates as an approximately 16 kDa protein under non-reducing and reducing conditions in SDS-PAGE, and was lyophilized from 0.2 µm filtered PBS solution, pH 7.0.
Species	Mouse
Source	Mouse
Description	basic Fgf2 is found in almost all tissues of mesodermal and neuroectodermal origin and also in tumors derived from these tissues. Endothelial cells produce large amounts of this factor. Some Fgf2 is associated with the extracellular matrix of the subendothelial cells. Many cells express Fgf2 only transiently and store it in a biologically inactive form. The mechanism by which the factor is released by the cells is not known. It is released after tissue injuries and during inflammatory processes.
Purity	>98%, as determined by SDS-PAGE and HPLC.
Sequence	MAASGITSLP ALPEDGGAAF PPGHFKDPKR LYCKNGGFFL RIHPDGRVDG VREKSDPHVK LQLQAEERGV VSIKGVCANR YLAMKEDGRL LASKCVTEEC FFFERLESNN YNTYRSRKYS SWYVALKRTG QYKLGSKTGP GQKAILFLPM SAKS
Molecular Weight	Native Mouse Fgf2 basic is generated by the proteolytic removal of the signal peptide and propeptide, the molecule has a calculated mass of 16 kDa.

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Biological Activity	The ED(50) was determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing Fgf2 receptors is ≤ 0.2 ng/ml, corresponding to a specific activity of $\geq 1 \times 10^6$ units/mg.
Endotoxin	Endotoxin content was assayed using a LAL gel clot method. Endotoxin level was found to be less than 0.1 ng/g (1 EU/g).
Reconstitution	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Storage	The lyophilized protein is stable for at least 2 years from date of receipt at -20°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2°C - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.
Official Symbol	Fgf2
Pathways	Downstream signaling of activated FGFR; ESC Pluripotency Pathways; Endochondral Ossification; FGFR ligand binding and activation; FGFR1 ligand binding and activation; FGFR1b ligand binding and activation; FGFR1c ligand binding and activation; FGFR2 ligand binding and activation; FGFR2c ligand binding and activation; FGFR3 ligand binding and activation; FGFR3c ligand binding and activation; FGFR4 ligand binding and activation; Melanoma; PI-3K cascade; PI-3K cascade

GENE INFORMATION

Gene Name	Fgf2 fibroblast growth factor 2 [<i>Mus musculus</i>]
Synonyms	Fgf2; fibroblast growth factor 2; Fgfb; bFGF; Fgf-2; heparin-binding growth factor 2; HBGF-2; OTTMUSP00000046776; basic fibroblast growth factor

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Gene ID	14173
mRNA Refseq	NM_008006
Protein Refseq	NP_032032
UniProt ID	P15655
Function	chemoattractant activity; cytokine activity; fibroblast growth factor binding; fibroblast growth factor receptor binding; growth factor activity; heparin binding; ligand-dependent nuclear receptor transcription coactivator activity; protein binding; voltage-gated calcium channel activity
PDB rendering based on 1bas.	

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