

Growth Factor Data Sheet

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FGF2 is a member of the Fibroblast Growth Factor family of proteins. It is often called FGF-basic or bFGF. FGF2 is a single-chain polypeptide growth factor that plays a significant role in wound healing, it is a potent inducer of angiogenesis and it is essential for the growth of many stem and progenitor cells. FGF2 shares a 55% amino acid residue identity with FGF1 and interacts with heparin sulfate with nanomolar affinity. It is a potent inducer of DNA synthesis in a variety of cell types. FGF2 activates mesenchymal splice variants of FGF receptors (c splice variants) and also activates FGF Receptor 1b, but has little activity against FGFR2b or FGFR3b. It is most closely associated with FGF1 (aFGF).

Catalog Number Product Name	1540-02 Basic FGF (FGF2), Rat Recombinant Rat Fibroblast Growth Factor 2 Fibroblast Growth Factor-basic bFGF, FGF-2 basic FGF
Source	Escherichia coli
MW	16.4 kDa (146 amino acids)
Sequence	MPALPEDGGG AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV DGVREKSDPH VKLQLQAEER GVVSIKGVCA NRYLAMKEDG RLLASKCVTE ECFFFERLES NNYNTYRSRK YSSWYVALKR TGQYKLGSKT GPGQKAILFL PMSAKS
Accession Number	<u>P13109</u>
Purity	>98% by SDS-PAGE analysis. >95% by RP-HPLC analysis
Biological Activity	Fully biologically active when compared to standard. The ED_{50} as determined by a cell proliferation assay using murine BALB/c 3T3 cells is less than 0.2 ng/ml, corresponding to a specific activity of > 5.0×10^6 IU/mg.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.