

Growth Factor Data Sheet

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FGF1 is a member of the Fibroblast Growth Factor family of proteins. Also called FGF-acidic or aFGF, FGF1 lacks signal peptides and is believed to be secreted by a nonclassical mechanism. It has been detected in large amounts in the brain and is expressed in hepatocyte cells, vascular smooth muscle cells, CNS neurons, skeletal muscle cells, fibroblasts, keratinocytes, endothelial cells, intestinal columnar epithelial cells, and pituitary basophils and acidophils. FGF1 exhibits considerable species cross-reactivity and stimulates the proliferation of cells of mesodermal origin, as well as many cells of neuroectodermal, ectodermal, and endodermal origin. It is most closely associated with FGF2 (bFGF).

Catalog Number	1140-01
Product Name	Acidic FGF (FGF1), Human Recombinant Human Fibroblast Growth Factor 1 FGF1, aFGF Acidic FGF Endothelial cell growth factor
Source	<i>Escherichia coli</i>
MW	~15.8 kDa (141 amino acids)
Sequence	MFNLPPGNYK KPKLLYCSNG GHFLRILPDG TVDGTDRSD QHIQLQLSAE SVGEVYIKST ETGQYLAMDT DGLLYGSQTP NEECLFLERL EENHYNTYIS KKHAENWFV GLKKNKGSCKR GPRTHYGQKA ILFLPLPVSS D
Accession Number	P05230
Purity	>95% by SDS-PAGE and HPLC analyses
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 0.5 ng/ml, corresponding to a specific activity of >2.0×10 ⁶ IU/mg in the presence of 10 µg/ml of heparin.
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.