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ImmunO™

Recombinant Human Fibroblast Growth Factor-acidic

Catalog #: 98222

Lot #: Typical

Form: Sterile white lyophilized (freeze-dried) powder. Recombinant FGF-1 was lyophilized from a concentrated (1mg/ml) sterile solution containing 10mM NaP, pH 7.6 and 100mM NaCl.

Description: Single-chain polypeptide growth factor that plays a significant role in the process of wound healing and is a potent inducer of angiogenesis. It binds to heparin which potentiates its biological activity and protects it from proteolysis. The growth factor is an extremely potent inducer of DNA synthesis in a variety of cell types from mesoderm and neuroectoderm lineages and also has chemotactic and mitogenic activities. It was originally named acidic fibroblast growth factor based upon its chemical properties and to distinguish it from basic fibroblast growth factor. Other homologous FGF belonging to the same family are int-2 (FGF-3), FGF-5, FGF-6, K-FGF and KGF (keratinocyte growth factor = FGF-7). All factors are products of different genes, some of which are Oncogene products (FGF-3, FGF-4, FGF-5). Recombinant Human Fibroblast Growth Factor-acidic (FGF-1) produced in E.coli is a single, non-glycosylated polypeptide chain containing 155 amino acids and having a molecular mass of 17463 Dalton.

Source: E.coli

Reconstitution: It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Purity: > 95% (by RP-HPLC and Reducing and non-reducing SDS-PAGE.)

Protein: Protein content is determined by UV spectroscopy at 280 nm, RP-HPLC calibrated against a known standard and quantitation on SDS-PAGE against a known standard.

Biological

Activity: Recombinant FGF-1 is fully biologically active when compared to standards. The ED50, calculated by the dose-dependant proliferation of BAF3 cells expressing FGF receptors (measured by 3H-thymidine uptake) is less then 10 ng/ml, corresponding to a specific activity of 1×10^5 Units/mg.

AA

Sequence: MFNLPPGNYK KPKLLYCSNG GHFLRILPDG TVDGTRDRSD QHQLQLSAE SVGEVYIKST ETGQYLAMDT DGLLYGSQTP NEECLFLERL EENHYNTYIS KKHAEKNWFV GLKKNNGSCKR GPRTHYGQKA ILFLPLPVSS D

Storage: Lyophilized product is very stable at -20 degrees. Reconstituted material should be aliquoted and frozen at -20. It is recommended to add a carrier protein (0.1% HSA or BSA) for long term storage.

Control #

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