

Recombinant Human Fibroblast Growth Factor-8 (rh FGF-8)

Synonyms: FGF-8b, HBGF-8, AIGF, KAL6.

Introduction: FGF8 is part of the fibroblast growth factor family. FGF family members have wide mitogenic and cell survival activities, and participate in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGF8 supports androgen and anchorage independent growth of mammary tumor cells. FGF8 over expression increases tumor growth and angiogenesis. The adult expression of FGF-8 gene is restricted to testes and ovaries. FGF8 functions as an embryonic epithelial factor. FGF8 takes part in midbrain and limb development, organogenesis, embryo gastrulation and left-right axis determination. There are 4 known alternate spliced forms of FGF8; FGF8A, FGF-8B, FGF-8E and FGF-8F. The human and murine FGF8 A and B are identical unlike human and mouse FGF8 E and F are 98% identical. FGF-8 targets mammary carcinoma cells and other cells expressing the FGF receptors.

Description: rh Fibroblast Growth Factor-8 FGF 8 produced in E.Coli is a non-glycosylated polypeptide chain containing 194 amino acids and having a total molecular mass of 22.5kDa.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a concentrated (1 mg/ml) solution containing 5mM Na₃PO₄ + 50 MM NaCl, pH7.5

Solubility: It is recommended to reconstitute the lyophilized FGF 8 in sterile 18M-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh FGF-8, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGF 8 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles

Purity: Greater than 97.0% as determined by analysis by SDS-PAGE.

Amino acid sequence: MQVTVQSSPN FTQHVREQSL VTDQLSRRLI RTYQLYSRTS GKHVQVLANK RINAMAEDGD PFAKLIVETD TFGSRVRVRG AETGLYICMN KKGKLIKSN GKGKDCVFTE IVLENNYTAL QNAKYEGWYM AFTRKGRPRK GSKTRQHQRV VHFMRKRLPRG HHTTEQSLRF EFLNYPFTR SLRGSQRTWA PEPR.

Biological Activity: The ED₅₀ as determined by its ability to induce proliferation of mouse 3T3 fibroblasts, is 5-7ng/ml, corresponding to a specific activity of 2x10⁵ units/mg.

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<i>small</i>	5 µg	Cat.N°	11344830
<i>medium</i>	25 µg	Cat.N°	11344834

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