DATASHEET
Version 20181206

FGF-8c, Mouse

Cat. No.: Z03075-1

Size: 1.0 mg

Synonyms: Fibroblast growth factor 8, FGF-8, Androgen-induced growth factor, AIGF, Heparin-binding growth factor 8, HBGF-8, Fgf8

Description:

Fibroblast Growth Factor 8c (FGF-8c) is a cytokine belonging to the heparin-binding FGF family, which has at least 23 members. In different species, e.g. human and mouse, FGF-8 has 8 different isoforms, from FGF-8a to FGF-8h. Different FGF-8 isoforms have different affinities to the receptors, thus conduct different signaling cascade pathways. FGF-8 has very widespread expression pattern during embryonic development, and is an organizer and inducer for gastrulation, somitogenesis, morphogenesis, and limb induction. However, FGF-8 is also a potential oncogene: in normal adult cells, FGF-8 has very low expression; on the other hand, FGF-8 is highly expressed in cancer cells of breast, prostate, and ovarian tumors. FGF-8 promotes tumor angiogenesis by increasing neovascularization, and induces osteoblastic differentiation.
Recombinant mouse Fibroblast Growth Factor 8c (rmFGF-8c) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 247 amino acids. A fully biologically active molecule, rmFGF-8c has a molecular mass of 28.2 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 MQVRSAAQKR GPGAGNPADT LGQGHEDRPF GQRSRAGKNF
00041 TNPAPNYPEE GSKEQRDSVL PKVTQRHVRE QSLVTDQLSR
00081 RLIRTYQLYS RTSGKHVQVL ANKRINAMAE DGDPFAKLIV
00121 ETDTFGSRVR VRGAETGLYI CMNKKGKLIA KSNGKGKDCV
00161 FTEIVLENNY TALQNAKYEG WYMAFTRKGR PRKGSKTRQH
00201 QREVHFMKRL PRGHHTTEQS LRFEFLNYPP FTRSLRGSQR
00241 TWAPEPR
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Source: *E. coli*

Species: Mouse

Biological Activity: ED_{50} < 150 ng/mL, measured by a cell proliferation assay using 3T3 cells, corresponding to a specific activity of > 6.7×10^3 units/mg.

Molecular Weight: 28.2 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH_2O at 100 µg/mL.

Purity: > 95% by SDS-PAGE and HPLC analyses.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant mouse Fibroblast Growth Factor 8c (rmFGF-8c) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rmFGF-8c should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.

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