

Product No. F-3043
Lot 076H4849

Anti-Fibroblast Growth Factor-9 (FGF-9)
Developed in Rabbit
IgG Fraction of Antiserum

Anti-Fibroblast Growth Factor-9 (FGF-9) is developed in rabbit using synthetic FGF-9 peptides (amino acids 55-68 and 150-162) conjugated to KLH as the immunogen. Whole antiserum is fractionated and then further purified by ion exchange chromatography to provide the IgG fraction of antiserum. This fraction is essentially free of other rabbit serum proteins. The product is supplied as a liquid in 0.01 M phosphate buffered saline, pH 7.4, containing 0.1% sodium azide (see MSDS)* as a preservative.

Specificity

Anti-FGF-9 reacts in immunoblotting with recombinant human FGF-9 (28 kD). Anti-FGF-9 does not cross react with recombinant FGF-acidic or FGF-basic in dot blot assay.

Description

Fibroblast growth factors (FGFs) are a family of polypeptides which can initiate and regulate cell proliferation and differentiation. They play important roles in normal as well as abnormal development and in wound healing and repair. The FGF family currently includes 9 members (FGF-1 to FGF-9) which shares 30-50% sequence identity. All except FGF-8 contain two conserved positions of cysteine residues. FGF-9, also known as Glia-Activating Factor (GAF), was initially identified in culture supernatant of a human glioma cell line having the capability to promote glial cell proliferation.^{1,2} FGF-9 is a heparin binding molecule which is glycosylated and consists of a single polypeptide of 208 amino acids with 30% sequence similarity with other members of the FGF family.³ The molecule is conserved across species (rat FGF-9 is 94% identical to the human molecule).

FGF-9 has a unique spectrum of activity on cells and acts on the central nervous system. FGF-9 has mitogenic effect on fibroblasts but unlike other FGFs has no effect on endothelial cells. Studies performed to date have identified FGF-9 expression in brain and kidney.²

Uses

Anti-FGF-9 may be used for the detection of cells expressing FGF-9 in organs like brain and kidney, and in investigating FGF-9 roles in development and tumorigenesis.

Protein Concentration: 10.0 mg/ml by absorbance at 280 nm ($E_{280}^{1\%} = 14.0$)

Working Dilution

A dilution of 1:500 was determined by indirect immunoblotting using heparin-purified, recombinant, human FGF-9.

Storage

For extended storage, freeze in working aliquots. For continuous use, store at 2-8°C. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

References

- 1 Narno, K., et al., J. Biol. Chem., **268**, 2857 (1993).
- 2 Miyamoto, M., et al., Mol. Cell. Biol., **13**, 4251 (1993).
- 3 Seo, M., et al., FEBS Lett., **370**, 231 (1995).