

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FGF-9 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) FGF-3, -4, -5, -7, -10, -11, -13, -16, -17, -18, -19, rhFGF acidic, rhFGF basic, recombinant mouse (rm) FGF-6, -8b, -8c, or -15 is observed. In Western blots, no cross-reactivity with rhFGF-3, -4, -5, -6, -7, -10, -13, rmFGF-8b, or rmFGF-8c is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 36923
Purification	Protein A or G purified from ascites
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human FGF-9 Met1-Ser208 Accession # P31371
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Human FGF-9 (Catalog # 273-F9)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The FGF family is comprised of at least nine polypeptides that show a variety of biological activities toward cells of mesenchymal, neuronal and epithelial origin. All FGFs have two conserved cysteine residues and share 30-50% sequence identity at the amino acid level. FGF-9, also named glia-activating factor, was originally identified and purified from the supernatant of a human glioma cell line as a heparin-binding mitogenic growth factor for glial cells. FGF-9 has also been shown to stimulate the proliferation of oligodendrocyte type 2 astrocyte progenitor cells, Balb/c3T3 fibroblasts and PC-12 cells. However, unlike FGF acidic and basic, FGF-9 is not a mitogen for human umbilical vein endothelial cells.

The human FGF-9 cDNA encodes a 208 amino acid residue protein that contains a potential N-linked glycosylation site. The native protein is glycosylated. FGF-9 exhibits approximately 30% sequence similarity to other members of the FGF family. Although FGF-9 lacks a typical secretion signal, the protein is secreted efficiently after synthesis. Rat FGF-9 cDNA has been cloned and shown to be highly homologous to human FGF-9. The two proteins differ only in one amino acid residue. The expression of the FGF-9 transcripts has been shown to be restricted to the brain and the kidney.

References:

1. Naruo, K. *et al.* (1993) J. Biol. Chem. **268**:2857.
2. Miyamoto, M. *et al.* (1993) Mol. Cell Biol. **13**:4251.