

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FGF-9 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) FGF-4, rhFGF-5, rhFGF-6, rhFGF-7, rhFGF-8, rhFGF-10, rhFGF-17, rhFGF-18, and rhFGF-19 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
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 as a 0.2 µm filtered solution in PBS.

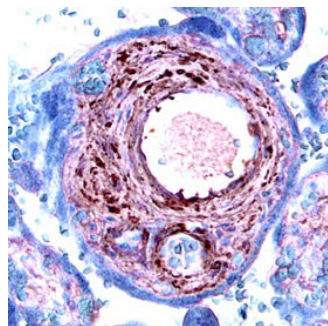
APPLICATIONS

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	0.1 µg/mL	Recombinant Human FGF-9 (Catalog # 273-F9)
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



FGF-9 in Human Placenta. FGF-9 was detected in immersion fixed paraffin-embedded sections of human placenta using 5 µg/mL Goat Anti-Human FGF-9 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-273-NA) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-AEC Cell & Tissue Staining Kit (red; Catalog # CTS009) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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.