

FGF-9 (D-8): sc-8413



The Power to Question

BACKGROUND

Fibroblast growth factor-1 (FGF-1), also designated acidic FGF, and fibroblast growth factor-2 (FGF-2), also referred to as basic FGF, are members of a family of growth factors that stimulate proliferation of cells of mesenchymal, epithelial and neuroectodermal origin. Additional members of the FGF family include the oncogenes FGF-3 (Int-2) and FGF-4 (HST/Kaposi), FGF-5, FGF-6, FGF-7 (KGF), FGF-8 (AIGF), FGF-9 (GAF) and FGF-10. Members of the FGF family share 30-55% amino acid sequence identity, similar gene structure, and are capable of transforming cultured cells when overexpressed in transfected cells. Cellular receptors for FGFs are members of a second multigene family including four tyrosine kinases, designated Flg (FGFR-1), Bek (FGFR-L), TKF and FGFR-3.

REFERENCES

- Moore, R., et al. 1986. Sequence, topography and protein coding potential of mouse Int-2: a putative oncogene activated by mouse mammary tumor virus. *EMBO J.* 5: 919-924.
- Delli Bovi, P., et al. 1987. An oncogene isolated by transfection of Kaposi's sarcoma DNA encodes a growth factor that is a member of the FGF family. *Cell* 50: 729-737.

CHROMOSOMAL LOCATION

Genetic locus: FGF9 (human) mapping to 13q12.11; Fgf9 (mouse) mapping to 14 C3.

SOURCE

FGF-9 (D-8) is a mouse monoclonal antibody raised against amino acids 1-208 of FGF-9 of human origin.

PRODUCT

Each vial contains 200 µg IgG₃ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FGF-9 (D-8) is recommended for detection of precursor and mature FGF-9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FGF-9 siRNA (h): sc-39460, FGF-9 siRNA (m): sc-39461, FGF-9 shRNA Plasmid (h): sc-39460-SH, FGF-9 shRNA Plasmid (m): sc-39461-SH, FGF-9 shRNA (h) Lentiviral Particles: sc-39460-V and FGF-9 shRNA (m) Lentiviral Particles: sc-39461-V.

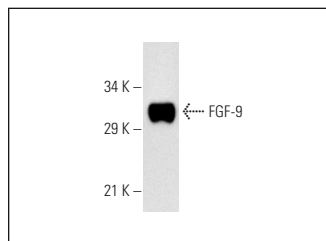
Molecular Weight of FGF-9: 30 kDa.

Positive Controls: T98G cell lysate: sc-2294 or human stomach extract: sc-363780.

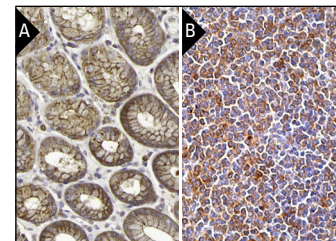
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



FGF-9 (D-8): sc-8413. Western blot analysis of mouse recombinant FGF-9.



FGF-9 (D-8): sc-8413. Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing cytoplasmic and membranous staining of glandular cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in red and white pulp (B).

SELECT PRODUCT CITATIONS

- Torres, C.B., et al. 2006. Fibroblast growth factor 9: cloning and immunolocalisation during tooth development in *Didelphis albiventris*. *Arch. Oral Biol.* 51: 263-272.
- Lin, Y., et al. 2009. Neuron-derived FGF-9 is essential for scaffold formation of Bergmann radial fibers and migration of granule neurons in the cerebellum. *Dev. Biol.* 329: 44-54.
- Ostrup, E., et al. 2010. Differential endometrial gene expression in pregnant and nonpregnant sows. *Biol. Reprod.* 83: 277-285.
- Sharma, A.K., et al. 2013. Cotransplantation with specific populations of spina bifida bone marrow stem/progenitor cells enhances urinary bladder regeneration. *Proc. Natl. Acad. Sci. USA* 110: 4003-4008.
- Zhang, L., et al. 2015. Fibroblast growth factor receptor 1 and related ligands in small-cell lung cancer. *J. Thorac. Oncol.* 10: 1083-1090.
- Šucurovic, S., et al. 2017. Spatial and temporal analyses of FGF9 expression during early pregnancy. *Cell. Physiol. Biochem.* 42: 2318-2329.
- Zhang, Z., et al. 2020. FGF9 promotes cisplatin resistance in colorectal cancer via regulation of Wnt/β-catenin signaling pathway. *Exp. Ther. Med.* 19: 1711-1718.
- Kamali, S., et al. 2021. Oligodendrocyte-specific deletion of FGFR2 ameliorates MOG₃₅₋₅₅-induced EAE through ERK and Akt signalling. *Brain Pathol.* 31: 297-311.
- Rajendran, R., et al. 2021. Oligodendrocyte-specific deletion of FGFR1 reduces cerebellar inflammation and neurodegeneration in MOG₃₅₋₅₅-induced EAE. *Int. J. Mol. Sci.* 22: 9495.

RESEARCH USE

For research use only, not for use in diagnostic procedures.