10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FGF4 Antibody

Catalog # ASC10629

Product Information

Application	WB, IF, ICC, E
Primary Accession	P08620
Other Accession	P08620, 122750
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	22048
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	FGF4 antibody can be used for detection of FGF4 by Western blot at 0.5 - 1 g/mL. Antibody can also be used for immunocytochemistry starting at 2.5 g/mL. For immunofluorescence start at 2.5 g/mL.

Additional Information

Gene ID	2249
Other Names	Fibroblast growth factor 4, FGF-4, Heparin secretory-transforming protein 1, HST, HST-1, HSTF-1, Heparin-binding growth factor 4, HBGF-4, Transforming protein KS3, FGF4, HST, HSTF1, KS3
Target/Specificity	FGF4;
Reconstitution & Storage	FGF4 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	FGF4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FGF4 (HGNC:3682)
Function	Plays an important role in the regulation of embryonic development, cell proliferation, and cell differentiation. Required for normal limb and cardiac valve development during embryogenesis. May play a role in embryonic molar tooth bud development via inducing the expression of MSX1, MSX2 and MSX1-mediated expression of SDC1 in dental mesenchyme cells (By similarity).
Cellular Location	Secreted.

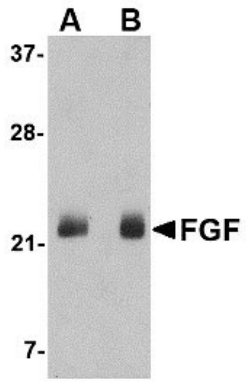
Background

FGF4 Antibody: Fibroblast growth factor 4 (FGF4) is a member of the fibroblast growth factor (FGF) family that possess broad mitogenic and cell survival activities and play key roles in growth and survival of stem cells during embryogenesis, tissue regeneration, and carcinogenesis. FGF4 was identified by its strong oncogenic transforming activity and is a potent angiogenic factor, expressed in several highly vascularized tumors and also in adult mouse testis, intestine, and brain. Studies on the mouse homolog suggests a function in bone morphogenesis and limb development through the sonic hedgehog (SHH) signaling pathway. Furthermore, FGF4 regulates neural progenitor cell proliferation and neuronal differentiation. Recent studies show a growth-promoting role for FGF4 in human embryonic stem cells and a putative feedback inhibition mechanism by a novel FGF4 splice isoform that may serve to promote differentiation at a later stages of development.

References

Powers CJ, McLeskey SW, and Wellstein A. Fibroblast growth factors, their receptors and signaling. Endocr. Relat. Cancer2000; 7:165-97.
Delli-Bovi P, Curatola AM, Kern FG, et al. An oncogene isolated by transfection of Kaposi's sarcoma DNA encodes a growth factor that is a member of the FGF family. Cell1987; 50:729-37.
Yoshida T, Ishimaru K, Sakamoto H, et al. Angiogenic activity of the recombinant hst-1 protein. Cancer Lett.1994; 83:261-268.
Laufer E, Nelson CE, Johnson RL, et al. Sonic hedgehog and Fgf-4 act through a signaling cascade and feedback loop to integrate growth and patterning of the developing limb bud. Cell1994; 79:993-1003.

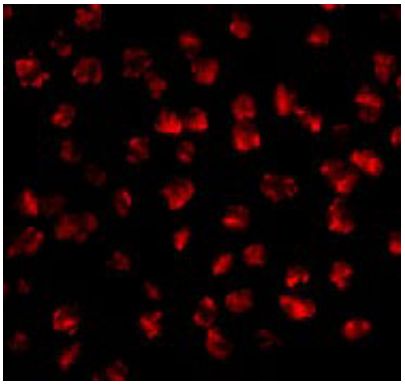
Images



Western blot analysis of FGF4 in NIH 3T3 cell lysate with FGF4 antibody at (A) 0.5 and (B) 1 µg/mL.

Immunocytochemistry of FGF4 in 3T3 cells with FGF4 antibody at 2.5 µg/mL.

Immunofluorescence of FGF4 in 3T3 cells with FGF4 antibody at 2.5 µg/mL.



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