

FGF4 Antibody

Catalog # ASC10629

Specification

FGF4 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IF, ICC, E
P08620
P08620, 122750
Human, Mouse
Rabbit
Polyclonal

IgG

FGF4 antibody can be used for detection of FGF4 by Western blot at $0.5 - 1 \mu g/mL$.

Antibody can also be used for

immunocytochemistry starting at 2.5 $\mu g/mL$. For immunofluorescence start at

 $2.5 \mu g/mL$.

FGF4 Antibody - Additional Information

Gene ID 2249

Target/Specificity

FGF4:

Reconstitution & Storage

FGF4 antibody can be stored at 4°C for three months and -20°C, 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.

FGF4 Antibody - 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.

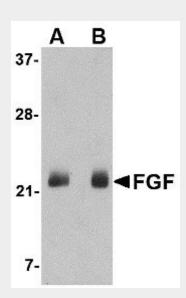


FGF4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

FGF4 Antibody - Images

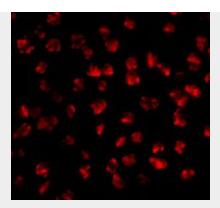


Western blot analysis of FGF4 in NIH 3T3 cell lysate with FGF4 antibody at (A) 0.5 and (B) 1 $\mu g/mL$.



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.

FGF4 Antibody - 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.

FGF4 Antibody - 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.