

FGF4 Antibody

Catalog # ASC10629

Specification

FGF4 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IF, ICC, E <u>P08620</u> <u>P08620</u>, <u>122750</u> Human, Mouse Rabbit Polyclonal IgG FGF4 antibody can be used for detection of FGF4 by Western blot at 0.5 - 1 μg/mL. Antibody can also be used for immunocytochemistry starting at 2.5 μg/mL. For immunofluorescence start at 2.5 μg/mL.

FGF4 Antibody - Additional Information

Gene ID 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.

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Precautions

FGF4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FGF4 Antibody - Protein Information

Name FGF4 (<u>HGNC:3682</u>)

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.

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

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 μ g/mL.





Immunofluorescence of FGF4 in 3T3 cells with FGF4 antibody at 2.5 μ g/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

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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.