

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human FGF-4 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with bovine FGF acidic, recombinant human (rh) FGF acidic, bovine FGF basic, rhFGF basic, or rhβ-ECGF is observed. The antibody                             |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 19805                                                                                                                                                                                                                             |
| <b>Purification</b>       | Protein A or G purified from ascites                                                                                                                                                                                                                                        |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human FGF-4<br>Ala31-Leu206<br>Accession # P08620                                                                                                                                                                                       |
| <b>Conjugate</b>          | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## 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.

|                       |                                                                        |
|-----------------------|------------------------------------------------------------------------|
| <b>Neutralization</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>   | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

FGF-4, the product of a developmentally regulated gene (*hst-1*), is a member of the FGF family that is efficiently secreted. The gene for FGF-4 (also known as FGFK or K-FGF for Kaposi sarcoma-associated FGF) was initially discovered as a transforming gene by the NIH-3T3 focus formation assay using DNA derived from human tumors (including stomach and colon cancers, hepatocellular carcinomas, and Kaposi's sarcomas). FGF-4 does not seem to be expressed in normal adult tissues. However, expression of the gene is spatially and temporally regulated during embryonic development. The murine homologue of human FGF-4 has been cloned and shown to be 82% homologous to the human protein at the amino acid sequence level. Human FGF-4 has been shown to exhibit cross species activity.

*In vitro*, FGF-4 is mitogenic for fibroblasts and endothelial cells. FGF-4 has been shown to be a potent angiogenesis promoter *in vivo*. FGF-4 has potent transforming potential apparently through an autocrine mechanism of action. FGF-4 plays a key role in limb development and has been identified as the molecular mediator of the activities of the apical ectodermal ridge that is required for directing the outgrowth and patterning of vertebrate limbs.

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