

FGFR-4 (E-13): sc-31284

BACKGROUND

Acidic and basic fibroblast growth factors (FGFs) are members of a family of multifunctional polypeptide growth factors that stimulate proliferation of cells of mesenchymal, epithelial and neuroectodermal origin. Like other growth factors, FGFs act by binding and activating specific cell surface receptors. These include the Flg receptor or FGFR-1, the Bek receptor or FGFR-2, FGFR-3, FGFR-4, FGFR-5 and FGFR-6. These receptors usually contain an extracellular ligand-binding region containing three immunoglobulin-like domains, a transmembrane domain and a cytoplasmic tyrosine kinase domain. The gene encoding human FGFR-4, unlike the other FGFR genes, is alternatively spliced to produce only one isoform. It is expressed in fetal adrenal, lung, kidney, liver, pancreas, intestine, striated muscle and spleen tissues. FGFR-4 is also overexpressed in breast cancers and, subsequently, is a potential target for drug therapy.

REFERENCES

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- Dionne, C.A., et al. 1990. Cloning and expression of two distinct high-affinity receptors cross-reacting with acidic and basic fibroblast growth factors. *EMBO J.* 9: 2685-2692.
- Partanen, J., et al. 1991. FGFR-4, a novel acidic fibroblast growth factor receptor with a distinct expression pattern. *EMBO J.* 10: 1347-1354.
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- Tuominen, H., et al. 2001. Expression and glycosylation studies of human FGF receptor 4. *Protein Expr. Purif.* 21: 275-285.

CHROMOSOMAL LOCATION

Genetic locus: FGFR4 (human) mapping to 5q35.2; Fgfr4 (mouse) mapping to 13 B1.

SOURCE

FGFR-4 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of FGFR-4 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-31284 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FGFR-4 (E-13) is recommended for detection of FGFR-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

FGFR-4 (E-13) is also recommended for detection of FGFR-4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FGFR-4 siRNA (h): sc-35368, FGFR-4 siRNA (m): sc-39966, FGFR-4 shRNA Plasmid (h): sc-35368-SH, FGFR-4 shRNA Plasmid (m): sc-39966-SH, FGFR-4 shRNA (h) Lentiviral Particles: sc-35368-V and FGFR-4 shRNA (m) Lentiviral Particles: sc-39966-V.

Molecular Weight of unmodified FGFR-4: 88 kDa.

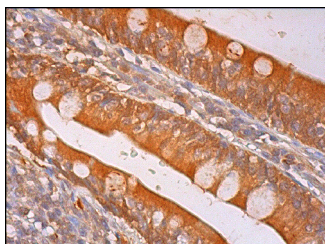
Molecular Weight of phosphorylated or glycosylated FGFR-4: 95-125 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



FGFR-4 (E-13): sc-31284. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

STORAGE

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

RESEARCH USE

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