

# FGFR-4 (A-10): sc-136988

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

FGFR-4 (A-10) is a mouse monoclonal antibody raised against amino acids 25-145 of FGFR-4 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FGFR-4 (A-10) is available conjugated to agarose (sc-136988 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-136988 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-136988 PE), fluorescein (sc-136988 FITC), Alexa Fluor<sup>®</sup> 488 (sc-136988 AF488), Alexa Fluor<sup>®</sup> 546 (sc-136988 AF546), Alexa Fluor<sup>®</sup> 594 (sc-136988 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-136988 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-136988 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-136988 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

FGFR-4 (A-10) is recommended for detection of FGFR-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

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.

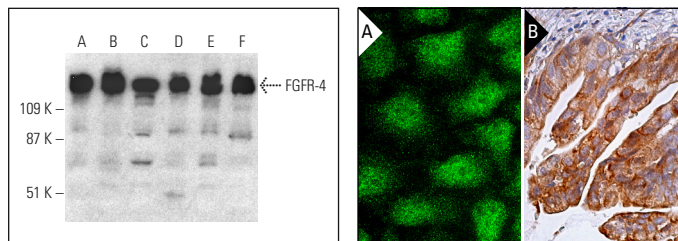
Molecular Weight of phosphorylated or glycosylated FGFR-4: 95-125 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or KNRK whole cell lysate: sc-2214.

## STORAGE

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

## DATA



FGFR-4 (A-10) HRP: sc-136988 HRP. Direct western blot analysis of FGFR-4 expression in HeLa (A), NIH/3T3 (B), AMJ2-C8 (C), MCF7 (D), CSML0 (E) and KNRK (F) whole cell lysates.

FGFR-4 (A-10): sc-136988. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic staining of glandular cells (B).

## SELECT PRODUCT CITATIONS

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- Chew, N.J., et al. 2020. FGFR3 signaling and function in triple negative breast cancer. *Cell Commun. Signal.* 18: 13.
- Altunel, E., et al. 2020. Development of a precision medicine pipeline to identify personalized treatments for colorectal cancer. *BMC Cancer* 20: 592.
- Dadone-Montaudié, B., et al. 2020. Novel therapeutic insights in dedifferentiated liposarcoma: a role for FGFR and MDM2 dual targeting. *Cancers* 12: 3058.
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## RESEARCH USE

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

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