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 FGR 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; Fgrf4 (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 IgG1 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 of agarose in 1 ml, for IP; or to HRP (sc-136988 HRP), 200 μg/ml, for WB, (HCP) and ELISA; to either phycoerythrin (sc-136988 PE), fluorescein (sc-136988 FITC), Alexa Fluor® 488 (sc-136988 AF488), Alexa Fluor® 546 (sc-136988 AF546), Alexa Fluor® 594 (sc-136988 AF594) or Alexa Fluor® 647 (sc-136988 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-136988 AF680) or Alexa Fluor® 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 1:50-1:1500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:5000) 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-35366-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.

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

SELECT PRODUCT CITATIONS
4. Smith, E.R., et al. 2017. FGFR23 is synthesised locally by renal tubules and 647 kappa light chain in 1.0 ml of PBS with < 0.1%

DATA

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