

## FGFR4 Rabbit mAb

Catalog # AP76968

## **Product Information**

Application WB Primary Accession P22455

**Reactivity** Rat, Human, Mouse

**Host** Rabbit

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human FGFR4

**Purification** Affinity Chromatography

Calculated MW 87954

## **Additional Information**

**Gene ID** 2264

Other Names FGFR4

**Dilution** WB~~1/500-1/1000

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

## **Protein Information**

Name FGFR4

Synonyms JTK2, TKF

**Function** Tyrosine-protein kinase that acts as a cell-surface receptor for fibroblast

growth factors and plays a role in the regulation of cell proliferation,

differentiation and migration, and in regulation of lipid metabolism, bile acid

biosynthesis, glucose uptake, vitamin D metabolism and phosphate homeostasis. Required for normal down- regulation of the expression of CYP7A1, the rate-limiting enzyme in bile acid synthesis, in response to FGF19. Phosphorylates PLCG1 and FRS2. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of RAS, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway.

Promotes SRC-dependent phosphorylation of the matrix protease MMP14 and its lysosomal degradation. FGFR4 signaling is down-regulated by receptor internalization and degradation; MMP14 promotes internalization and degradation of FGFR4. Mutations that lead to constitutive kinase activation or impair normal FGFR4 inactivation lead to aberrant signaling.

**Cellular Location** Cell membrane; Single-pass type I membrane protein. Endosome.

Endoplasmic reticulum. Note=Internalized from the cell membrane to recycling endosomes, and from there back to the cell membrane

**Tissue Location** Expressed in gastrointestinal epithelial cells, pancreas, and gastric and

pancreatic cancer cell lines

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