

FGFR4 Antibody (clone 4H2B10B2)

Mouse Monoclonal Antibody Catalog # ALS12829

Specification

FGFR4 Antibody (clone 4H2B10B2) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC <u>P22455</u> Human Mouse Monoclonal 88kDa KDa

FGFR4 Antibody (clone 4H2B10B2) - Additional Information

Gene ID 2264

Other Names Fibroblast growth factor receptor 4, FGFR-4, 2.7.10.1, CD334, FGFR4, JTK2, TKF

Target/Specificity Ni-NTA purified truncated recombinant FGFR4-Trx-His expressed in E. Coli strain BL21 (DE3)

Reconstitution & Storage +4°C or -20°C, Avoid repeated freezing and thawing.

Precautions FGFR4 Antibody (clone 4H2B10B2) is for research use only and not for use in diagnostic or therapeutic procedures.

FGFR4 Antibody (clone 4H2B10B2) - 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

Volume 50 μl

FGFR4 Antibody (clone 4H2B10B2) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

FGFR4 Antibody (clone 4H2B10B2) - Images



Anti-FGFR4 antibody IHC of human liver. FGFR4 Antibody (clone 4H2B10B2) - Background

Tyrosine-protein kinase that acts as 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.

FGFR4 Antibody (clone 4H2B10B2) - References

Partanen J.M.,et al.EMBO J. 10:1347-1354(1991). Ron D.,et al.J. Biol. Chem. 268:5388-5394(1993). Takaishi S.,et al.Biochem. Biophys. Res. Commun. 267:658-662(2000). Kostrzewa M.,et al.Mamm. Genome 9:131-135(1998). Ezzat S.,et al.J. Clin. Invest. 109:69-78(2002).