

Phospho-FGFR3 (Y724) Antibody

Rabbit mAb Catalog # AP92744

Specification

Phospho-FGFR3 (Y724) Antibody - Product Information

Application WB, FC, ICC, IP

Primary Accession P22607
Clonality Monoclonal

Other Names

ACH; CD333; CEK2; FGFR3; Fibroblast growth factor receptor 3; HSFGFR3EX; Hydroxyaryl protein

kinase; JTK4; Tyrosine kinase JTK 4;

Storage Condition and Buffer

Isotype Rabbit IgG
Host Rabbit
Calculated MW 87710 Da

Phospho-FGFR3 (Y724) Antibody - Additional Information

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

Phospho-FGFR3 (Y724)

Description Receptor for acidic and basic fibroblast growth factors. Preferentially binds FGF1.

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

Phospho-FGFR3 (Y724) Antibody - Protein Information

Name FGFR3

Synonyms JTK4

Function

Tyrosine-protein kinase that acts as a cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of cell proliferation, differentiation and apoptosis. Plays an essential role in the regulation of chondrocyte differentiation, proliferation and apoptosis, and is required for normal skeleton development. Regulates both osteogenesis and postnatal bone mineralization by osteoblasts. Promotes apoptosis in chondrocytes, but can also promote cancer cell proliferation. Required for normal development of the inner ear. Phosphorylates PLCG1, CBL 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. Plays a role in the regulation of vitamin D metabolism. Mutations that lead to constitutive kinase activation or impair normal FGFR3



maturation, internalization and degradation lead to aberrant signaling. Over-expressed or constitutively activated FGFR3 promotes activation of PTPN11/SHP2, STAT1, STAT5A and STAT5B. Secreted isoform 3 retains its capacity to bind FGF1 and FGF2 and hence may interfere with FGF signaling.

Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Cytoplasmic vesicle. Endoplasmic reticulum. Note=The activated receptor is rapidly internalized and degraded. Detected in intracellular vesicles after internalization of the autophosphorylated receptor [Isoform 3]: Secreted.

Tissue Location

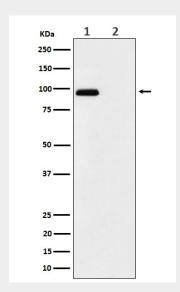
Expressed in brain, kidney and testis. Very low or no expression in spleen, heart, and muscle. In 20- to 22-week old fetuses it is expressed at high level in kidney, lung, small intestine and brain, and to a lower degree in spleen, liver, and muscle. Isoform 2 is detected in epithelial cells. Isoform 1 is not detected in epithelial cells. Isoform 2 are detected in fibroblastic cells.

Phospho-FGFR3 (Y724) Antibody - Protocols

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

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

Phospho-FGFR3 (Y724) Antibody - Images



Western blot analysis of Phospho-FGFR3 (Y724) expression in (1) MCF7 treated with pervanadate cell lysate; (2) untreated.