For research use only

## **Anti-FGFR3 Antibody**

**CATALOG NO:** A1630-100

ALTERNATIVE NAMES: JTK4; Fibroblast growth factor receptor 3; FGFR-3; CD333

**AMOUNT**: 100 μl

IMMUNOGEN: KLH-conjugated synthetic peptide encompassing a sequence

within the center region of human FGFR3

HOST/ISOTYPE: Rabbit IgG

CLONALITY: Polyclonal

**SPECIFICITY:** Recognizes endogenous levels of FGFR3 protein

SPECIES REACTIVITY: Human, Mouse, Rat

**PURIFICATION:** The antibody was purified by affinity chromatography

FORM: Liquid

**FORMULATION:** Supplied in 0.42% Potassium phosphate; 0.87% Sodium chloride;

pH 7.3; 30% glycerol and 0.01% sodium azide

STORAGE CONDITIONS: Shipped at 4°C. For long term storage store at -20°C in small

aliquots to prevent freeze-thaw cycles

**DESCRIPTION:** Tyrosine-protein kinase that acts as 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.

**ADDI ICATIONI:** \MR: 1:500 = 1:1000

**IHC**; 1:100 – 1:200

09/18

Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.

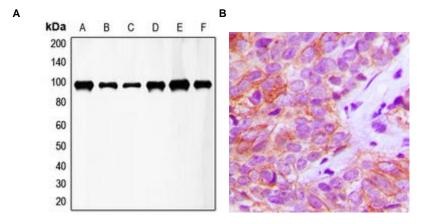


Fig. A. Western blot analysis of FGFR3 expression in HeLa (A); A549 (B); T47D (C); mouse kidney (D); mouse heart (E); rat lung (F) whole cell lysates.

Fig. b. IHC analysis of FGFR3 staining in human breast cancer formalin fixed paraffin embedded tissue section

## **RELATED PRODUCTS:**

- GFAP Antibody (Cat. No. 3206)
- Vimentin Antibody (Cat. No. 3634)
- Fibronectin Antibody (Cat. No. 3630)
- FGF-2 Antibody (Cat. No. 5039)
- Anti-CD133 Antibody (Cat. No. A1622)
- Anti-CHRDL1 Antibody (Cat. No. A1623)

FOR RESEARCH USE ONLY! Not to be used on humans.

