p-FGFR-3 (Tyr 724): sc-33041

**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. 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-3 maps to chromosome 4p16.3 and is alternatively spliced to produce three isoforms that are expressed in brain, kidney and testis. Defects in FGFR-3 are associated with several diseases, including Crouzon syndrome, achondroplasia, thanatophoric dysplasia, craniosynostosis adelaide type and hypochondroplasia. Mutations in FGFR-3 are also a cause of some bladder and cervical cancers. Amino acid substitutions within the tyrosine kinase domain activation loop of FGFR-3 result in autophosphorylation of tyrosine residues in the intracellular domain. Phosphorylation at residue Tyr 724 abolishes all FGFR-3 tyrosine phosphorylation.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: FGFR3 (human) mapping to 4p16.3; Gfgr3 (mouse) mapping to 5 B2.

**SOURCE**

p-FGFR-3 (Tyr 724) is a rabbit polyclonal antibody raised against a short amino acid sequence containing Tyr 724 phosphorylated FGFR-3 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-33041 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

p-FGFR-3 (Tyr 724) is recommended for detection of Tyr 724 phosphorylated FGFR-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with correspondingly phosphorylated FGFR-1 and FGFR-2.

p-FGFR-3 (Tyr 724) is also recommended for detection of correspondingly phosphorylated FGFR-3 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for FGFR-3 siRNA (h): sc-29314, FGFR-3 siRNA (m): sc-35367, FGFR-3 shRNA Plasmid (h): sc-29314-SH, FGFR-3 shRNA Plasmid (m): sc-35367-SH, FGFR-3 shRNA (h) Lentiviral Particles: sc-29314-V and FGFR-3 shRNA (m) Lentiviral Particles: sc-35367-V.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Western Blotting Luminol Reagent: sc-2048 and Lambda Phosphatase: sc-200312A. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**SELECT PRODUCT CITATIONS**


**STORAGE**

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

**RESEARCH USE**

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