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#3160

## FGF Receptor 3 Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

<b>Applications:</b> W	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 145	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P22607	<b>Entrez-Gene Id:</b> 2261
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### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

FGF Receptor 3 Antibody detects endogenous levels of total FGF receptor 3 protein. This antibody does not cross-react with other FGF receptor family members.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence surrounding His111 of human FGF receptor 3. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Fibroblast growth factors (FGFs) produce mitogenic and angiogenic effects in target cells by signaling through cell surface receptor tyrosine kinases. There are four members of the FGF receptor family: FGFR1 (flg), FGFR2 (bek, KGFR), FGFR3, and FGFR4. Each receptor contains an extracellular ligand-binding domain, a transmembrane domain, and a cytoplasmic kinase domain (1). Following ligand binding and dimerization, the receptors are phosphorylated at specific tyrosine residues (2). Seven tyrosine residues in the cytoplasmic tail of FGFR1 can be phosphorylated: Tyr463, 583, 585, 653, 654, 730, and 766. Tyr653 and Tyr654 are important for catalytic activity of activated FGFR and are essential for signaling (3). The other phosphorylated tyrosine residues may provide docking sites for downstream signaling components, such as Crk and PLCγ (4,5).

FGFR-3 participates in a diverse array of biological processes, including cell growth, differentiation, and migration. Activating mutations in FGFR-3 are associated with multiple myeloma, cervical carcinoma, and bladder cancer and it represents a potential target for therapy (6).

### Background References

1. Powers, C.J. et al. (2000) *Endocr Relat Cancer* 7, 165-97.
2. Reilly, J.F. et al. (2000) *J Biol Chem* 275, 7771-8.
3. Mohammadi, M. et al. (1996) *Mol Cell Biol* 16, 977-89.
4. Mohammadi, M. et al. (1991) *Mol Cell Biol* 11, 5068-78.
5. Larsson, H. et al. (1999) *J Biol Chem* 274, 25726-34.
6. Knowles, M.A. (2008) *Future Oncol* 4, 71-83.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting

### Cross-Reactivity Key

**H:** Human

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