#2544 Store at –20°C

Phospho-FGF Receptor 1 (Tyr766) (1E5) Rabbit mAb

☑ 100 µl
(10 western blots)

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Entrez-Gene ID #2260
Swiss-Prot Acc. #P11362

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W Transfected	H	120, 140 kDa	Rabbit IgG**

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: FGFR-1 (flg), FGFR-2 (bek, KGFR), FGFR-3 and FGFR-4. 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 FGFR-1 can be phosphorylated: Tyr463, Tyr583, Tyr585, Tyr653, Tyr654, Tyr730 and Tyr766. Tyrosines 653 and 654 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).

Autophosphorylation of Tyr766 of FGFR1 is critical for phospholipase C (PLC) binding and activation and also plays a role in the negative regulation of FGFR1 activity *in vivo* (6).

Specificity/Sensitivity: Phospho-FGF Receptor 1 (Tyr766) (1E5) Rabbit mAb detects transfected levels of FGFR-1 only when phosphorylated at tyrosine 766. The antibody may cross-react with other FGFR family members and some activated protein tyrosine kinases including EGFR and insulin/IGF-I receptors.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr766 of human FGF receptor-1.

Background References:

(1) Powers, C.J. et al. (2000) *Endocr. Relat. Cancer* 7, 165–197.

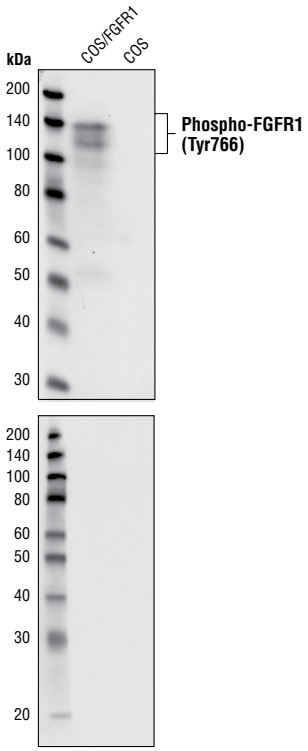
(2) Reilly, J.F. and Maher, P.A. (2001) *J. Cell Biol.* 275, 7771–7778.

(3) Mohammadi, M. et al. (1996) *Mol. Cell. Biol.* 16, 977–989.

(4) Mohammadi, M. et al. (1991) *Mol. Cell. Biol.* 11, 5068–5078.

(5) Larsson, H. et al. (1999) *J. Biol. Chem.* 274, 25726–25734.

(6) Partanen, J. et al. (1998) *Genes Dev.* 12, 2332–44.



Western blot analysis of cell extracts from COS cells overexpressing human FGFR1 and control COS cells, using Phospho-FGF Receptor-1 (Tyr766) (1E5) Rabbit mAb. Before antibody probing, the transferred membrane was untreated (upper) or CIP treated (lower) to confirm the phospho-specificity of the antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.