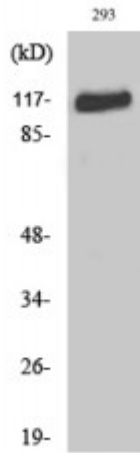


Anti-Flg antibody



Description	Rabbit polyclonal to Flg.
Model	STJ93081
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, WB
Immunogen	Synthesized peptide derived from human Flg around the non-phosphorylation site of Y654.
Immunogen Region	600-680 aa
Gene ID	2260
Gene Symbol	FGFR1
Dilution range	WB 1:500-1:2000IF 1:200-1:1000ELISA 1:5000
Specificity	Flg Polyclonal Antibody detects endogenous levels of Flg protein.
Tissue Specificity	Detected in astrocytoma, neuroblastoma and adrenal cortex cell lines. Some isoforms are detected in foreskin fibroblast cell lines, however isoform 17, isoform 18 and isoform 19 are not detected in these cells.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Fibroblast growth factor receptor 1 FGFR-1 Basic fibroblast growth factor receptor 1 BFGFR bFGF-R-1 Fms-like tyrosine kinase 2 FLT-2 N-sam Proto-oncogene c-Fgr CD antigen CD331

Molecular Weight	120 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:3688OMIM:101600
Alternative Names	Fibroblast growth factor receptor 1 FGFR-1 Basic fibroblast growth factor receptor 1 BFGFR bFGF-R-1 Fms-like tyrosine kinase 2 FLT-2 N-sam Proto-oncogene c-Fgr CD antigen CD331
Function	Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of embryonic development, cell proliferation, differentiation and migration. Required for normal mesoderm patterning and correct axial organization during embryonic development, normal skeletogenesis and normal development of the gonadotropin-releasing hormone (GnRH) neuronal system. Phosphorylates PLCG1, FRS2, GAB1 and SHB. 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. Promotes phosphorylation of SHC1, STAT1 and PTPN11/SHP2. In the nucleus, enhances RPS6KA1 and CREB1 activity and contributes to the regulation of transcription. FGFR1 signaling is down-regulated by IL17RD/SEF, and by FGFR1 ubiquitination, internalization and degradation.
Sequence and Domain Family	The second and third Ig-like domains directly interact with fibroblast growth factors (FGF) and heparan sulfate proteoglycans. Isoforms lacking the first Ig-like domain have higher affinity for fibroblast growth factors (FGF) and heparan sulfate proteoglycans than isoforms with all three Ig-like domains.
Cellular Localization	Cell membrane. Single-pass type I membrane protein. Nucleus. Cytoplasm, cytosol. Cytoplasmic vesicle. After ligand binding, both receptor and ligand are rapidly internalized. Can translocate to the nucleus after internalization, or by translocation from the endoplasmic reticulum or Golgi apparatus to the cytosol, and from there to the nucleus.
Post-translational Modifications	Autophosphorylated. Binding of FGF family members together with heparan sulfate proteoglycan or heparin promotes receptor dimerization and autophosphorylation on tyrosine residues. Autophosphorylation occurs in trans between the two FGFR molecules present in the dimer and proceeds in a highly ordered manner. Initial autophosphorylation at Tyr-653 increases the kinase activity by a factor of 50 to 100. After this, Tyr-583 becomes phosphorylated, followed by phosphorylation of Tyr-463, Tyr-766, Tyr-583 and Tyr-585. In a third stage, Tyr-654 is autophosphorylated, resulting in a further tenfold increase of kinase activity. Phosphotyrosine residues provide

docking sites for interacting proteins and so are crucial for FGFR1 function and its regulation. Ubiquitinated. FGFR1 is rapidly ubiquitinated by NEDD4 after autophosphorylation, leading to internalization and lysosomal degradation. CBL is recruited to activated FGFR1 via FRS2 and GRB2, and mediates ubiquitination and subsequent degradation of FGFR1. N-glycosylated in the endoplasmic reticulum. The N-glycan chains undergo further maturation to an Endo H-resistant form in the Golgi apparatus.

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