



20211019BB

Anti-Human FGFR-1 (#4D45)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	101-M415A
Size:	100 µg
Lot. No.:	According to product label

Preparation: The antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with recombinant extracellular domains of human Fibroblast Growth Factor Receptor-1 (sFGFR-1) of mixed isoforms. The IgG1 fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Target Background

Synonyms (Target):	FGFR1; CEK; FLG; OGD; FLT2; KAL2; BFGFR; CD331; FGFBR; FLT-2; HBGFR; N-SAM; FGFR-1; bFGF-R-1
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Fibroblast growth factors (FGFs) comprise a family of at least eighteen structurally related proteins that are involved in a multitude of physiological and pathological cellular processes, including cell growth, differentiation, angiogenesis, wound healing and tumorigenesis. The biological activities of the FGFs are mediated by a family of type I transmembrane tyrosine kinases which undergo dimerization and autophosphorylation after ligand binding. Four distinct genes encoding closely related FGF receptors, FGF R1-4, are known. All four genes for FGF Rs encode proteins with an N-terminal signal peptide, three immunoglobulin (Ig) like domains, an acid-box region containing a run of acidic residues between the IgI and IgII domains, a transmembrane domain and the split tyrosine-kinase domain. Multiple forms of FGF R1-3 are generated by alternative splicing of the mRNAs. A frequent splicing event involving FGF R1 and 2 results in receptors containing all three Ig domains, referred to as the α isoform, or only IgII and IgIII, referred to as the β isoform. Only the α isoform has been identified for FGF R3 and FGF R4. Additional splicing events for FGF R1-3, involving the C-terminal half of the IgIII domain encoded by two mutually exclusive alternative exons, generate FGF receptors with alternative IgIII domains (IIIb and IIIc). A IIIa isoform which is a secreted FGF binding protein containing only the N-terminal half of the IgIII domain plus some intron sequences has also been reported for FGF- -R1. Mutations in FGF R1-3 have been found in patients with birth defects involving craniosynostosis. The complex patterns of expression of these receptors as well as the specificity of their interactions with the various FGF ligand family members is an important research topic.

Database References Target

Protein RefSeq:	NP_075598
Uniprot ID:	P11362
mRNA RefSeq:	NM_023110

Product Specifications

Host	Mouse
Reactivity against	Human
Clonality	Monoclonal Antibody
Clone	(#4D45)
Isotype	IgG2
Purification	Protein G chromatography
Antigen	Recombinant human FGF-R1 EC domains of mixed isoforms
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody was selected for its ability to detect human FGF-R1 (all isoforms).

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications: WB, FC

Recommended usage:

Western Blot: 1:500 - 1:1000

FC

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!