

FGFR1-Y307 Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9814A

Specification

FGFR1-Y307 Antibody - Product Information

Application	WB,E
Primary Accession	P11362
Other Accession	P16092 , P21804
Reactivity	Human
Predicted	Chicken, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	91868
Antigen Region	285-314

FGFR1-Y307 Antibody - Additional Information

Gene ID 2260

Other 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, CD331, FGFR1, BFGFR, CEK, FGFBR, FLG, FLT2, HBGFR

Target/Specificity

This FGFR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 285-314 amino acids from human FGFR1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

FGFR1-Y307 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FGFR1-Y307 Antibody - Protein Information

Name FGFR1

Synonyms BFGFR, CEK, FGFBR, FLG, FLT2, HBGFR

Function Tyrosine-protein kinase that acts as a 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.

Cellular Location

Cell membrane; Single-pass type I membrane protein. Nucleus. Cytoplasm, cytosol. Cytoplasmic vesicle. Note=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

Tissue Location

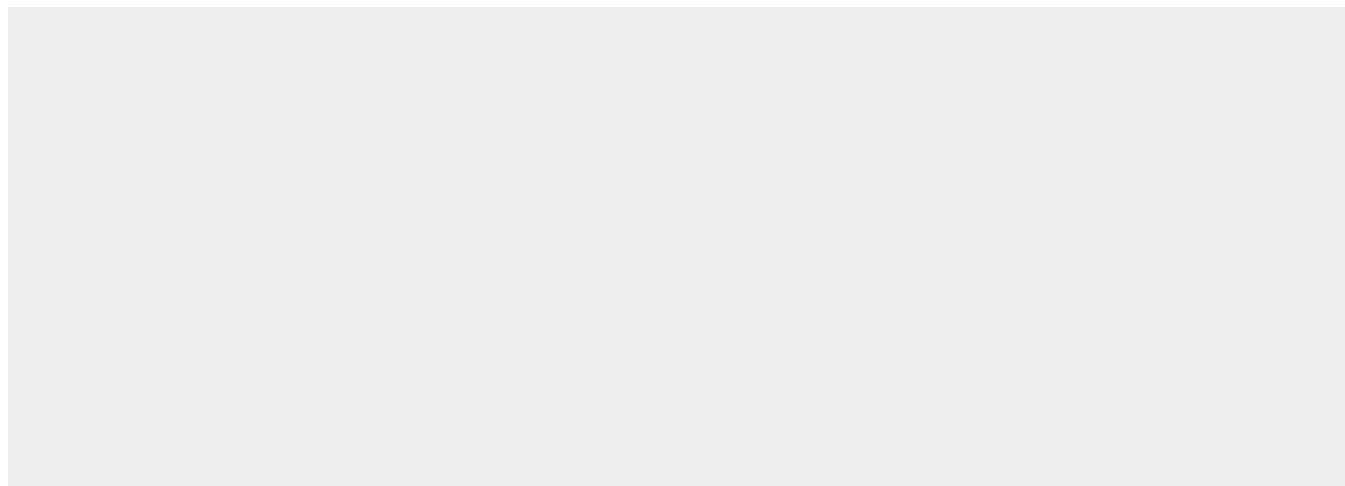
Detected in astrocytoma, neuroblastoma and adrenal cortex cell lines. Some isoforms are detected in foreskin fibroblast cell lines, however isoform 17, isoform 18 and isoform 19 are not detected in these cells.

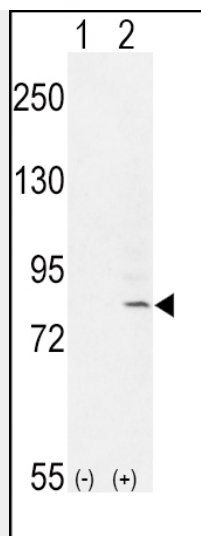
FGFR1-Y307 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FGFR1-Y307 Antibody - Images





Western blot analysis of FGFR1 (arrow) using rabbit polyclonal FGFR1-Y307 (Cat. #AP9814a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the FGFR1 gene (Lane 2).

FGFR1-Y307 Antibody - Background

The protein encoded by this gene is a member of the fibroblast growth factor receptor (FGFR) family, where amino acid sequence is highly conserved between members and throughout evolution. FGFR family members differ from one another in their ligand affinities and tissue distribution. A full-length representative protein consists of an extracellular region, composed of three immunoglobulin-like domains, a single hydrophobic membrane-spanning segment and a cytoplasmic tyrosine kinase domain. The extracellular portion of the protein interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. This particular family member binds both acidic and basic fibroblast growth factors and is involved in limb induction. Mutations in this gene have been associated with Pfeiffer syndrome, Jackson-Weiss syndrome, Antley-Bixler syndrome, osteoglophonic dysplasia, and autosomal dominant Kallmann syndrome 2. Chromosomal aberrations involving this gene are associated with stem cell myeloproliferative disorder and stem cell leukemia lymphoma syndrome.

FGFR1-Y307 Antibody - References

- Turner, N., et al. *Cancer Res.* 70(5):2085-2094(2010)
- Chen, G., et al. *Br. J. Cancer* 102(1):188-195(2010)
- Kang, W., et al. *J. Neurosci.* 29(46):14571-14580(2009)
- Marzioni, D., et al. *Int J Immunopathol Pharmacol* 22(3):627-638(2009)
- Hitosugi, T., et al. *Sci Signal* 2 (97), RA73 (2009)