

Goat Anti-FGFR2 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1412a

Specification

Goat Anti-FGFR2 Antibody - Product Information

Application	WB
Primary Accession	P21802
Other Accession	NP_075259 , 2263 , 14183 (mouse) , 25022 (rat)
Reactivity	Human
Predicted	Mouse, Rat, Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	92025

Goat Anti-FGFR2 Antibody - Additional Information

Gene ID 2263

Other Names

Fibroblast growth factor receptor 2, FGFR-2, 2.7.10.1, K-sam, KGFR, Keratinocyte growth factor receptor, CD332, FGFR2, BEK, KGFR, KSAM

Target/Specificity

Peptide with sequence C-GREKEITASPDY, from the internal region of the protein sequence according to NP_000132.3; NP_075259.4; NP_001138385.1; NP_001138386.1; NP_001138387.1; NP_001138388.1; NP_001138390.1; NP_001138391.1.

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-FGFR2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-FGFR2 Antibody - Protein Information

Name FGFR2

Synonyms BEK, KGFR, KSAM

Function

Tyrosine-protein kinase that acts as a cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of cell proliferation, differentiation, migration and apoptosis, and in the regulation of embryonic development. Required for normal embryonic patterning, trophoblast function, limb bud development, lung morphogenesis, osteogenesis and skin development. Plays an essential role in the regulation of osteoblast differentiation, proliferation and apoptosis, and is required for normal skeleton development. Promotes cell proliferation in keratinocytes and immature osteoblasts, but promotes apoptosis in differentiated osteoblasts. Phosphorylates PLCG1, FRS2 and PAK4. 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. FGFR2 signaling is down-regulated by ubiquitination, internalization and degradation. Mutations that lead to constitutive kinase activation or impair normal FGFR2 maturation, internalization and degradation lead to aberrant signaling. Over-expressed FGFR2 promotes activation of STAT1.

Cellular Location

Cell membrane; Single-pass type I membrane protein. Golgi apparatus. Cytoplasmic vesicle. Note=Detected on osteoblast plasma membrane lipid rafts. After ligand binding, the activated receptor is rapidly internalized and degraded [Isoform 3]: Cell membrane; Single-pass type I membrane protein. Note=After ligand binding, the activated receptor is rapidly internalized and degraded [Isoform 13]: Secreted.

Goat Anti-FGFR2 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](#)

Goat Anti-FGFR2 Antibody - Images



AF1412a (0.3 µg/ml) staining of A549 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-FGFR2 Antibody - Background

The protein encoded by this gene is a member of the fibroblast growth factor receptor 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 is a high-affinity receptor for acidic, basic and/or keratinocyte growth factor, depending on the isoform. Mutations in this gene are associated with Crouzon syndrome, Pfeiffer syndrome, Craniosynostosis, Apert syndrome, Jackson-Weiss syndrome, Beare-Stevenson cutis gyrata syndrome, Saethre-Chotzen syndrome, and syndromic craniosynostosis. Multiple alternatively spliced transcript variants encoding different isoforms have been noted for this gene.

Goat Anti-FGFR2 Antibody - References

- FGF21 signalling pathway and metabolic traits - genetic association analysis. Kaess BM, et al. Eur J Hum Genet, 2010 Aug 18. PMID 20717167.
- [Association of FGFR2 gene polymorphism with estrogen receptor positive breast cancer detected by fluorescent quantitative PCR.] Ren L, et al. Zhonghua Yi Xue Yi Chuan Xue Za Zhi, 2010 Aug. PMID 20677155.
- Incidence of breast cancer and its subtypes in relation to individual and multiple low-penetrance genetic susceptibility loci. Reeves GK, et al. JAMA, 2010 Jul 28. PMID 20664043.
- Risk of aggressive breast cancer in women of Han nationality carrying TGFB1 rs1982073 C allele and FGFR2 rs1219648 G allele in North China. Chen XH, et al. Breast Cancer Res Treat, 2010 Jul 17. PMID 20640597.
- Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.