10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FGF Receptor / FGFR2 Antibody (clone 1G3)

Mouse Monoclonal Antibody
Catalog # ALS14051

Specification

FGF Receptor / FGFR2 Antibody (clone 1G3) - Product Information

Application	**IHC**
Primary Accession	P21802
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**92kDa KDa**

FGF Receptor / FGFR2 Antibody (clone 1G3) - 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
Human FGFR2

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
FGF Receptor / FGFR2 Antibody (clone 1G3) is for research use only and not for use in diagnostic or therapeutic procedures.

FGF Receptor / FGFR2 Antibody (clone 1G3) - 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.

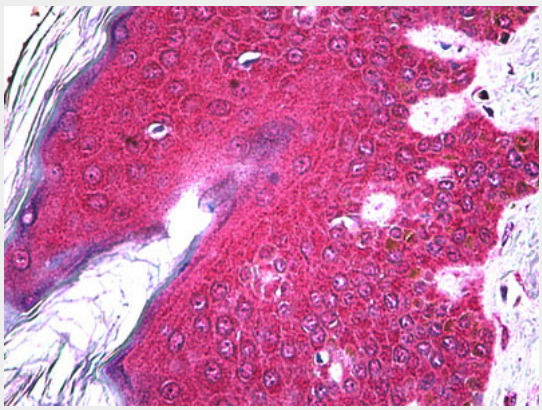
Cellular Location
Cell membrane; Single-pass type I membrane protein. Golgi apparatus. Cytoplasmic vesicle. Note=Detected on osteoblast plasma membrane lipid rafts. After ligand binding, the activated receptor is rapidly internalized and degraded [Isoform 3]: Cell membrane; Single-pass type I membrane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

FGF Receptor / FGFR2 Antibody (clone 1G3) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FGF Receptor / FGFR2 Antibody (clone 1G3) - Images



Anti-FGFR2 antibody IHC of human skin.

FGF Receptor / FGFR2 Antibody (clone 1G3) - Background

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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.

FGF Receptor / FGFR2 Antibody (clone 1G3) - References

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