

FGFR1 Blocking Peptide (Center)

Synthetic peptide Catalog # BP20934a

Specification

FGFR1 Blocking Peptide (Center) - Product Information

Primary Accession P11362

Other Accession <u>004589</u>, <u>P16092</u>, <u>P21804</u>

FGFR1 Blocking Peptide (Center) - 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

The synthetic peptide sequence is selected from aa 291-304 of HUMAN FGFR1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FGFR1 Blocking Peptide (Center) - 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 Blocking Peptide (Center) - Protocols

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

Blocking Peptides

FGFR1 Blocking Peptide (Center) - Images

FGFR1 Blocking Peptide (Center) - Background

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FGFR1 Blocking Peptide (Center) - References

Itoh N.,et al.Biochem. Biophys. Res. Commun. 169:680-685(1990). Dionne C.A.,et al.EMBO J. 9:2685-2692(1990). Johnson D.E.,et al.Mol. Cell. Biol. 10:4728-4736(1990). Isacchi A.,et al.Nucleic Acids Res. 18:1906-1906(1990). Wennstroem S.,et al.Growth Factors 4:197-208(1991).