Product Datasheet

FGFR3 Antibody

Catalog No: #33373

Package Size: #33373-1 50ul #33373-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

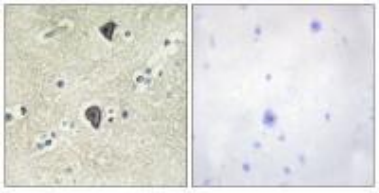
Product Name	FGFR3 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous levels of total FGFR3 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from human FGFR3.
Conjugates	Unconjugated
Target Name	FGFR3
Other Names	2.7.1.112; CEK2; HSFGFR3EX; fibroblast growth factor receptor 3 isoform 1 precursor; fibroblast growth factor receptor 3 isoform 2 precursor
Accession No.	Swiss-Prot: P22607NCBI Gene ID: 2261
SDS-PAGE MW	95kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

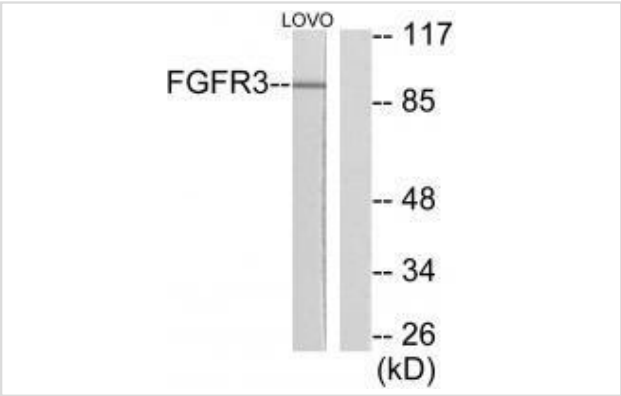
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

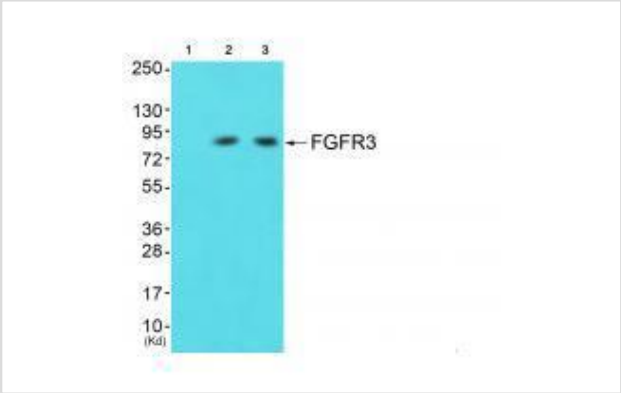
Images



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using FGFR3 antibody #33373.



Western blot analysis of extracts from LOVO cells, using FGFR3 antibody #33373.



Western blot analysis of extracts from 293 cells (Lane 2) and HepG2 cells (Lane 3), using FGFR3 antiobdy #33373. The lane on the left is treated with synthesized peptide.

Background

Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of cell proliferation, differentiation and apoptosis. Plays an essential role in the regulation of chondrocyte differentiation, proliferation and apoptosis, and is required for normal skeleton development. Regulates both osteogenesis and postnatal bone mineralization by osteoblasts. Promotes apoptosis in chondrocytes, but can also promote cancer cell proliferation. Required for normal development of the inner ear. Phosphorylates PLCG1, CBL and FRS2. 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. Plays a role in the regulation of vitamin D metabolism. Mutations that lead to constitutive kinase activation or impair normal FGFR3 maturation, internalization and degradation lead to aberrant signaling. Over-expressed or constitutively activated FGFR3 promotes activation of PTPN11/SHP2, STAT1, STAT5A and STAT5B. Secreted isoform 3 retains its capacity to bind FGF1 and FGF2 and hence may interfere with FGF signaling.

Jing Chen, Blood, Jul 2005; 106: 328 - 337.
Qing Zhang, Diabetes, Jan 2007; 56: 96 - 106.
Nigel P. Pringle, Development, Jan 2003; 130: 93.
Gladys Valverde-Franco, Hum. Mol. Genet., Feb 2004; 13: 271 - 284.

Published Papers

el at., Apurinic/apyrimidinic endonuclease 1 induced upregulation of fibroblast growth factor 2 and its receptor 3 induces angiogenesis in human osteosarcoma cells.In Cancer Sci on 2014 Feb by Tao Ren, Yi Qing et al..PMID:24329908 , , (2014)

PMID:24329908

el at., METTL3 suppresses anlotinib sensitivity by regulating m6A modification of FGFR3 in oral squamous cell carcinoma. In Cancer Cell Int on 2022 Sep 27 by Jie Chen, Shuai Li,et al..PMID:36167542, , (2022)

PMID:36167542

Note: This product is for in vitro research use only and is not intended for use in humans or animals.