

Rabbit Anti-Phospho-FGFR1 (Tyr307) antibody

SL5325R

Product Name:	Phospho-FGFR1 (Tyr307)
Chinese Name:	磷酸化碱性成纤维细胞生长因子受体1抗体
Alias:	FGFR1 (phospho Y307); p-FGFR1 (phospho Y307); bFGF R; BFGFR; C FGR; CD 331; CD331; CD331 antigen; CEK; FGFBR; FGFR 1; Fibroblast growth factor receptor 1; FLG; FLG protein; FLJ14326; FLT 2; FLT2; Fms like tyrosine kinase 2; Fms related tyrosine kinase 2; Fms related tyrosine kinase 2 Pfeiffer syndrome; H2; H3; H4; H5; HBGFR; Heparin binding growth factor receptor; Hydroxyaryl protein kinase; KAL 2; KAL2; MFR; N SAM; N sam tyrosine kinase; Protein tyrosine kinase; Tyrosylprotein kinase; Basic fibroblast growth factor receptor 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Cow, Horse, Guinea Pig,
Applications:	ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	90kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human FGFR1 around the phosphorylation site of Tyr307:LP(p-Y)VQ <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>

Fibroblast growth factors (FGFs) produce mitogenic and angiogenic effects in target cells by signaling through the cellular surface tyrosine kinase receptors. There are four members of the FGF receptor family: FGFR-1 (flg), FGFR-2 (bek, KGFR), FGFR-3 and FGFR-4. Each receptor contains an extracellular ligand binding domain, a transmembrane region and a cytoplasmic kinase domain (1). Following ligand binding and dimerization, the receptors are phosphorylated at specific tyrosine residues (2). Seven tyrosine residues in the cytoplasmic tail of FGFR-1 can be phosphorylated: Tyr463, Tyr583, Tyr585, Tyr653, Tyr654, Tyr730 and Tyr766. Tyrosine 653 and 654 are important for catalytic activity of the activated FGFR and are essential for signaling (3). The other phosphorylated tyrosine residues may provide docking sites for downstream signaling components such as Crk and PLCgamma.

Function:

Receptor for fibroblast growth factors FGF2 and FGF1. Receptor for FGF23 in the presence of KL (By similarity). Promotes mitogenesis in response to fibroblast growth factors. Activates PLCG1.

Subunit:

Homodimer. Interacts with KLB. Interacts with KL and FGF23. Interacts with SHB and GRB10. Interacts with PLCG1 (via SH2 domains). Interacts with KAL1; this interaction does not interfere with FGF2-binding to FGFR1, but prevents binding of heparin-bound FGF2. Interacts with SOX2 and SOX3.

Product Detail:

Subcellular Location:

Membrane; Single-pass type I membrane protein.

Tissue Specificity:

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.

Post-translational modifications:

Binding of FGF1 and heparin promotes autophosphorylation on tyrosine residues and activation of the receptor.

DISEASE:

Defects in FGFR1 are a cause of Pfeiffer syndrome (PS) [MIM:101600]; also known as acrocephalosyndactyly type V (ACS5). PS is characterized by craniosynostosis (premature fusion of the skull sutures) with deviation and enlargement of the thumbs and great toes, brachymesophalangy, with phalangeal ankylosis and a varying degree of soft tissue syndactyly.

Defects in FGFR1 are a cause of idiopathic hypogonadotropic hypogonadism (IHH) [MIM:146110]. IHH is defined as a deficiency of the pituitary secretion of follicle-stimulating hormone and luteinizing hormone, which results in the impairment of pubertal maturation and of reproductive function.

Similarity:

Belongs to the protein kinase superfamily. Tyr protein kinase family. Fibroblast growth factor receptor subfamily.

Contains 3 Ig-like C2-type (immunoglobulin-like) domains.

Contains 1 protein kinase domain.

SWISS:

P11362

Gene ID:

2260

Database links:

Entrez Gene: 2260Human

Entrez Gene: 14182 Mouse

Entrez Gene: 79114Rat

Omim: 136350Human

SwissProt: P11362Human

SwissProt: P16092Mouse

SwissProt: Q04589Rat

Unigene: 264887Human

Unigene: 265716Mouse

Unigene: 207203Rat

Unigene: 9797Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

碱性成纤维细胞生长因子(bFGF)是一种多功能的生长因子,具有促进细胞有丝分裂和诱导新血管形成作用,和其受体(FGFR1)碱性成纤维细胞生长因子受体结合之后,在人体各组织中具有广泛的生物学活性和生理病理作用.越来越多的研究表明Tumour细胞中bFGF-R1过度表达对Tumour发生发展具有重要意义。

