

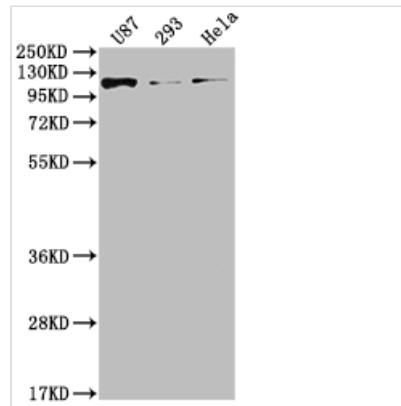


FGFR3 Recombinant Monoclonal Antibody

Product Code	CSB-RA966627A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P22607
Immunogen	A synthesized peptide derived from human FGFR3
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:5000
Relevance	<p>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.</p>
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cardiovascular; Signal transduction; Stem cells
Gene Names	FGFR3
Clone No.	6D4



Image



Western Blot

Positive WB detected in: U87 whole cell lysate,

293 whole cell lysate, HeLa whole cell lysate

All lanes: FGFR3 antibody at 1:2000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 88, 89, 76, 86 kDa

Observed band size: 115 kDa

Description

CUSABIO immunized a rabbit with a human FGFR3-derived peptide, followed by the isolation of splenocytes from the immunized rabbit. RNA was extracted from the splenocytes and converted into cDNA through reverse transcription. The FGFR3 antibody genes were extended using degenerate primers. PCR amplification yielded fragments of the FGFR3 antibody gene, which were then purified and cloned into an expression vector. The recombinant expression vector was transfected into a host system for antibody production. The resulting FGFR3 recombinant monoclonal antibodies were purified using affinity chromatography from the cell culture supernatant. The binding specificity and affinity of the recombinant FGFR3 monoclonal antibody were confirmed through ELISA and WB applications. This antibody specifically targets the human FGFR3 protein.