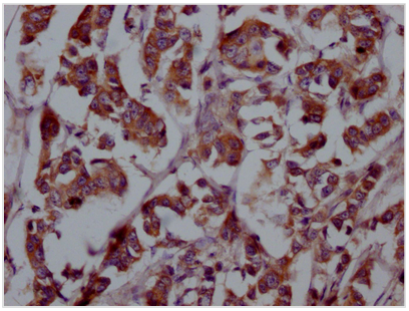
FGFR4 Recombinant Monoclonal Antibody

Product Code	CSB-RA927449A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P22455
Immunogen	A synthesized peptide derived from human FGFR4
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays a role in the regulation of cell proliferation, differentiation and migration, and in regulation of lipid metabolism, bile acid biosynthesis, glucose uptake, vitamin D metabolism and phosphate homeostasis. Required for normal down-regulation of the expression of CYP7A1, the rate-limiting enzyme in bile acid synthesis, in response to FGF19. Phosphorylates PLCG1 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. Promotes SRC-dependent phosphorylation of the matrix protease MMP14 and its lysosomal degradation. FGFR4 signaling is down-regulated by receptor internalization and degradation; MMP14 promotes internalization and degradation of FGFR4. Mutations that lead to constitutive kinase activation or impair normal FGFR4 inactivation lead to aberrant signaling.
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	Neuroscience; Cancer; Cardiovascular; Cell biology; Tags & Cell Markers; Signal transduction; Stem cells
Gene Names	FGFR4
Clone No.	8A5
Image	



IHC image of CSB-RA927449A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

FGFR4 is highly expressed in embryonic tissues and is involved in embryonic development, angiogenesis, and tissue differentiation. The expression of FGFR4 in adult tissues is restricted to actively developing tissues. In adults, FGFR4 regulates bile acid synthesis, metabolism, muscle development, and tissue healing, among other things. FGFR4 performs these functions via interacting with FGF19. FGFR4 dysregulation has been linked to the development of a variety of cancers. Overexpression of FGFR4 has been found in multiple human cancers, including breast cancer, liver cancer, and colon cancer, and has been associated with a shorter life expectancy. Furthermore, high FGFR4 expression is related to cancer resistance to chemotherapy and radiotherapy.

Mammalian cells are transfected with plasma vectors containing FGFR4 antibody genes, allowing for both recombinant FGFR4 antibody expression and secretion to the medium. Collecting the cell supernatant and purifying to obtain the recombinant FGFR4 antibody by Affinity-chromatography. This recombinant FGFR4 antibody has been validated to detect the FGFR4 protein of Human in the ELISA, IHC.