ARG42340
anti-FGFR4 antibody [4FR6D3] (PE)

Package: 50 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [4FR6D3] recognizes FGFR4
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The mouse monoclonal antibody 4FR6D3 reacts with an extracellular epitope of CD334, the fibroblast growth factor receptor 4, which is an approximately 88 kDa receptor tyrosine kinase expressed in variety of tissues.
Host	Mouse
Clonality	Monoclonal
Clone	4FR6D3
Isotype	IgG1, kappa
Target Name	FGFR4
Species	Human
Immunogen	NIH/3T3 cells transfected with full length Human FGFR4.
Conjugation	PE
Alternate Names	TKF; FGFR-4; CD antigen CD334; JTK2; CD334; EC 2.7.10.1; Fibroblast growth factor receptor 4

Application Instructions

Application table

Application	Dilution
FACS	10 µl / 100 µl of whole blood or 10^6 cells

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

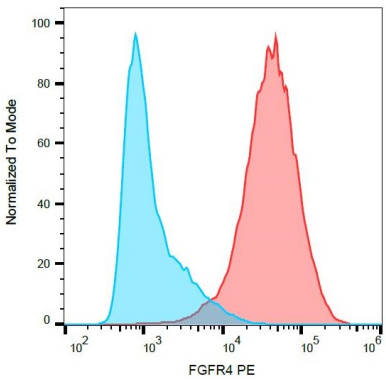
Properties

Form	Liquid
Purification	Purified
Buffer	PBS and 15 mM Sodium azide.
Preservative	15 mM Sodium azide
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	FGFR4
Gene Full Name	fibroblast growth factor receptor 4
Background	The protein encoded by this gene is a tyrosine kinase and cell surface receptor for fibroblast growth factors. The encoded protein is involved in the regulation of several pathways, including cell proliferation, cell differentiation, cell migration, lipid metabolism, bile acid biosynthesis, vitamin D metabolism, glucose uptake, and phosphate homeostasis. This protein consists of an extracellular region, composed of three immunoglobulin-like domains, a single hydrophobic membrane-spanning segment, and a cytoplasmic tyrosine kinase domain. The extracellular portion interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. [provided by RefSeq, Aug 2017]
Function	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. [UniProt]
Calculated Mw	88 kDa
PTM	N-glycosylated. Full maturation of the glycan chains in the Golgi is essential for high affinity interaction with FGF19. Ubiquitinated. Subject to proteasomal degradation when not fully glycosylated. Autophosphorylated. Binding of FGF family members together with heparan sulfate proteoglycan or heparin promotes receptor dimerization and autophosphorylation on tyrosine residues. Autophosphorylation occurs in trans between the two FGFR molecules present in the dimer. [UniProt]
Cellular Localization	Cell membrane; Single-pass type I membrane protein. Endosome. Endoplasmic reticulum. Note=Internalized from the cell membrane to recycling endosomes, and from there back to the cell membrane. Isoform 2: Secreted. Isoform 3: Cytoplasm. [UniProt]

Images



ARG42340 anti-FGFR4 antibody [4FR6D3] (PE) FACS image

Flow Cytometry: FGFR4 transfectants stained with ARG42340 anti-FGFR4 antibody [4FR6D3] (PE).