



EphB2 Monoclonal Antibody

Catalog No	YP-Ab-12914
Isotype	IgG
Reactivity	Human
Applications	WB;IF;ELISA
Gene Name	EPHB2
Protein Name	Ephrin type-B receptor 2
Immunogen	Purified recombinant fragment of EphB2 (aa17-200) expressed in E. Coli.
Specificity	EphB2 Monoclonal Antibody detects endogenous levels of EphB2 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide, 0.5% BSA, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	EPHB2; DRT; EPHT3; EPTH3; ERK; HEK5; TYRO5; Ephrin type-B receptor 2; Developmentally-regulated Eph-related tyrosine kinase; ELK-related tyrosine kinase; EPH tyrosine kinase 3; EPH-like kinase 5; EK5; hEK5; Renal carcinoma antigen NY-REN-47
Observed Band	
Cell Pathway	Cell membrane; Single-pass type I membrane protein. Cell projection, axon . Cell projection, dendrite .
Tissue Specificity	Brain, heart, lung, kidney, placenta, pancreas, liver and skeletal muscle. Preferentially expressed in fetal brain.
Function	catalytic activity: ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate., disease: Defects in EPHB2 are involved in the development of prostate cancer metastasis to the brain [MIM:603688]., disease: Defects in EPHB2 are involved in the progression of prostate cancer [MIM:176807]., function: Receptor for members of the ephrin-B family. Acts as a tumor suppressor., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family. Ephrin receptor subfamily., similarity: Contains 1 protein kinase domain., similarity: Contains 1 SAM (sterile alpha motif) domain., similarity: Contains 2 fibronectin type-III domains., subunit: The ligand-activated form interacts with multiple proteins, including GTPase-activating protein (RASGAP) through its SH2 domain. Binds RASGAP through the



juxtamembrane tyrosi

Background

This gene encodes a member of the Eph receptor family of receptor tyrosine kinase transmembrane glycoproteins. These receptors are composed of an N-terminal glycosylated ligand-binding domain, a transmembrane region and an intracellular kinase domain. They bind ligands called ephrins and are involved in diverse cellular processes including motility, division, and differentiation. A distinguishing characteristic of Eph-ephrin signaling is that both receptors and ligands are competent to transduce a signaling cascade, resulting in bidirectional signaling. This protein belongs to a subgroup of the Eph receptors called EphB. Proteins of this subgroup are distinguished from other members of the family by sequence homology and preferential binding affinity for membrane-bound ephrin-B ligands. Allelic variants are associated with prostate and brain cancer susceptibility. Alternative splicing results in multiple tr

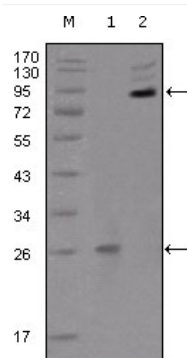
matters needing attention

Avoid repeated freezing and thawing!

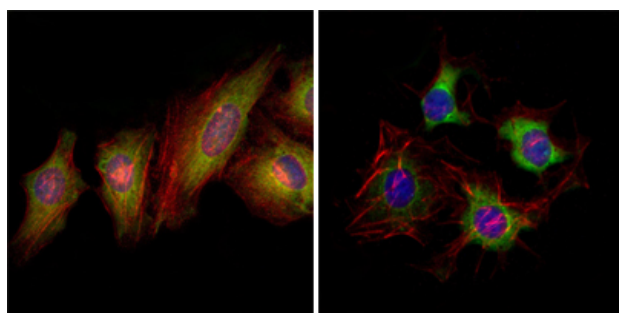
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis using EphB2 Monoclonal Antibody against truncated EphB2 recombinant protein (1) and extracellular EphB2(aa19-476)-hlgGfc transfected CHO-K1 cell lysate(2).



Immunofluorescence analysis of Hela (left) and HepG2 (right) cells using EphB2 Monoclonal Antibody (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.