Best Tools for immunology Research

EphA2 Monoclonal Antibody

Catalog No :	YM0222
Reactivity :	Human
Applications :	WB;IHC;IF;ELISA
Target :	EphA2
Fields :	>>MAPK signaling pathway;>>Ras signaling pathway;>>Rap1 signaling pathway;>>PI3K-Akt signaling pathway;>>Axon guidance
Gene Name :	EPHA2
Protein Name :	Ephrin type-A receptor 2
Human Gene Id :	1969
Human Swiss Prot No :	P29317
Mouse Swiss Prot No :	Q03145
Immunogen :	Purified recombinant fragment of EphA2 expressed in E. Coli.
Specificity :	EphA2 Monoclonal Antibody detects endogenous levels of EphA2 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	108kD

Cell Pathway : Axon guidance;

P References :
1. Shaji Abraham, Deborah W. Knapp, Liang Cheng. Clin Cancer Res. 2006 Jan 15;12(2):353-60.
2. Charles N Landen, Michael S Kinch, Anil K Sood. Expert Opin Ther Targets. 2005 Dec;9(6):1179-87.

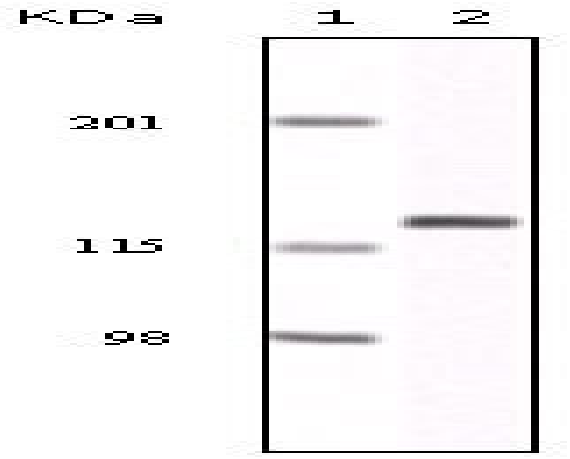
Background : This gene belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family. EPH and EPH-related receptors have been implicated in mediating developmental events, particularly in the nervous system. Receptors in the EPH subfamily typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. The ephrin receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. This gene encodes a protein that binds ephrin-A ligands. Mutations in this gene are the cause of certain genetically-related cataract disorders.[provided by RefSeq, May 2010],

Function : catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,function:Receptor for members of the ephrin-A family. Binds to ephrin-A1, -A3, -A4 and -A5.,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:Interacts with SLA (By similarity). Interacts with INPPL1/SHIP2.,tissue specificity:Expressed most highly in tissues that contain a high proportion of epithelial cells, e.g., skin, intestine, lung, and ovary.,

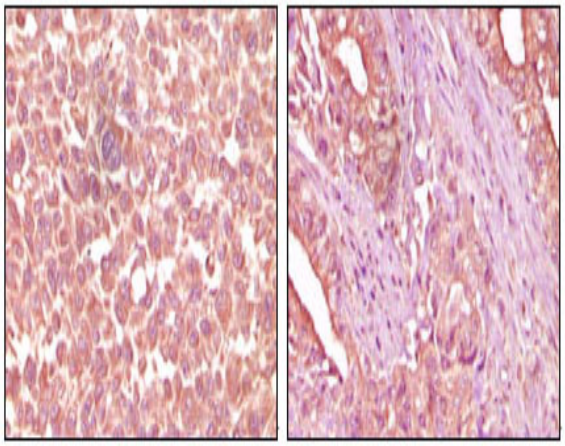
Subcellular Location : Cell membrane ; Single-pass type I membrane protein . Cell projection, ruffle membrane ; Single-pass type I membrane protein . Cell projection, lamellipodium membrane ; Single-pass type I membrane protein . Cell junction, focal adhesion . Present at regions of cell-cell contacts but also at the leading edge of migrating cells (PubMed:19573808, PubMed:20861311). Relocates from the plasma membrane to the cytoplasmic and perinuclear regions in cancer cells (PubMed:18794797). .

Expression : Expressed in brain and glioma tissue and glioma cell lines (at protein level). Expressed most highly in tissues that contain a high proportion of epithelial cells, e.g. skin, intestine, lung, and ovary.

Products Images



Western Blot analysis using EphA2 Monoclonal Antibody against NIH/3T3 cell lysate.



Immunohistochemistry analysis of paraffin-embedded human skin carcinoma (left) and pancreas carcinoma (right) tissue, showing cytoplasmic localization with DAB staining using EphA2 Monoclonal Antibody.