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Anti-Eph Receptor A2 Antibody
Catalog # ABO11052

Specification

Anti-Eph Receptor A2 Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P29317
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Ephrin type-A receptor 2(EPHA2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Eph Receptor A2 Antibody - Additional Information

Gene ID 1969

Other Names
Ephrin type-A receptor 2, 2.7.10.1, Epithelial cell kinase, Tyrosine-protein kinase receptor ECK, EPHA2, ECK

Calculated MW
108266 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
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.

Tissue Specificity
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. .

Protein Name
Ephrin type-A receptor 2

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human Eph receptor A2(954-976aa HQKRIAYSLLGLKDQVNTVGIPI), identical to the related rat and mouse sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the protein kinase superfamily. Tyr protein kinase family. Ephrin receptor subfamily.

Anti-Eph Receptor A2 Antibody - Protein Information

Name EPHA2

Synonyms ECK

Function
Receptor tyrosine kinase which binds promiscuously membrane- bound ephrin-A family ligands residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. Activated by the ligand ephrin- A1/EFNA1 regulates migration, integrin-mediated adhesion, proliferation and differentiation of cells. Regulates cell adhesion and differentiation through DSG1/desmoglein-1 and inhibition of the ERK1/ERK2 (MAPK3/MAPK1, respectively) signaling pathway. May also participate in UV radiation-induced apoptosis and have a ligand- independent stimulatory effect on chemotactic cell migration. During development, may function in distinctive aspects of pattern formation and subsequently in development of several fetal tissues. Involved for instance in angiogenesis, in early hindbrain development and epithelial proliferation and branching morphogenesis during mammary gland development. Engaged by the ligand ephrin-A5/EFNA5 may regulate lens fiber cells shape and interactions and be important for lens transparency development and maintenance. With ephrin-A2/EFNA2 may play a role in bone remodeling through regulation of osteoclastogenesis and osteoblastogenesis.

Cellular 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. Note=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).

Tissue Location
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.

Anti-Eph Receptor A2 Antibody - Protocols

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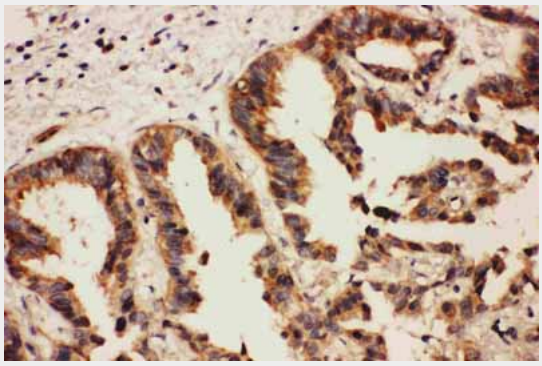
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Eph Receptor A2 Antibody - Images

Anti-Eph receptor A2 antibody, ABO11052, Western blottingLane 1: Rat Ovary Tissue LysateLane 2: HELA Cell LysateLane 3: MCF-7 Cell LysateLane 4: COLO320 Cell Lysate



Anti-Eph receptor A2 antibody, ABO11052, IHC(P)IHC(P): Human Lung Cancer Tissue

Anti-Eph Receptor A2 Antibody - Background

EPHA2(ephrin type-A receptor 2) also known as ECK, is a protein that in humans is encoded by the EPHA2 gene. This gene belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family. 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. By somatic cell hybrid analysis and fluorescence in situ hybridization, the EPHA2 gene is mapped to chromosome 1p36.1. By screening a HeLa cell cDNA library with degenerate oligonucleotides based on highly conserved regions of receptor protein-tyrosine kinases, Lindberg and Hunter isolated cDNAs encoding EPHA2,

which they called ECK. EPHA2 was readily detectable in human lens fiber cells using immunoblot and immunohistochemistry. EGFR and EPHA2 mediated HCV entry by regulating CD81 -claudin-1(CLDN1) coreceptor associations and viral glycoprotein-dependent membrane fusion.