

EPHA2 / EPH Receptor A2 Antibody (clone 1B3C7)

Mouse Monoclonal Antibody Catalog # ALS13049

Specification

EPHA2 / EPH Receptor A2 Antibody (clone 1B3C7) - Product Information

Application IHC
Primary Accession P29317
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 108kDa KDa

EPHA2 / EPH Receptor A2 Antibody (clone 1B3C7) - 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

Target/Specificity

Human EPHA2

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

EPHA2 / EPH Receptor A2 Antibody (clone 1B3C7) is for research use only and not for use in diagnostic or therapeutic procedures.

EPHA2 / EPH Receptor A2 Antibody (clone 1B3C7) - 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.

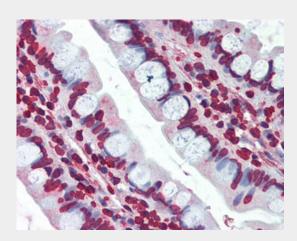
Volume 50 µl

EPHA2 / EPH Receptor A2 Antibody (clone 1B3C7) - Protocols

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

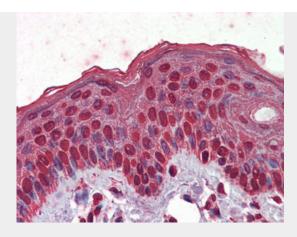
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EPHA2 / EPH Receptor A2 Antibody (clone 1B3C7) - Images



Anti-EPHA2 antibody IHC of human small intestine.





Anti-EPHA2 antibody IHC of human skin.

EPHA2 / EPH Receptor A2 Antibody (clone 1B3C7) - Background

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.

EPHA2 / EPH Receptor A2 Antibody (clone 1B3C7) - References

Lindberg R.A.,et al.Mol. Cell. Biol. 10:6316-6324(1990). Jin P.,et al.Arthritis Res. Ther. 10:R73-R73(2008). Gregory S.G.,et al.Nature 441:315-321(2006). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Miao H.,et al.Nat. Cell Biol. 2:62-69(2000).