

EPHA2 / EPH Receptor A2 Antibody (aa559-976, clone 3D7)
Mouse Monoclonal Antibody
Catalog # ALS12604**Specification**

EPHA2 / EPH Receptor A2 Antibody (aa559-976, clone 3D7) - Product Information

Application	WB, IHC-P, E
Primary Accession	P29317
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	108kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A E~~N/A

EPHA2 / EPH Receptor A2 Antibody (aa559-976, clone 3D7) - 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

Reconstitution & Storage

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

Precautions

EPHA2 / EPH Receptor A2 Antibody (aa559-976, clone 3D7) is for research use only and not for use in diagnostic or therapeutic procedures.

EPHA2 / EPH Receptor A2 Antibody (aa559-976, clone 3D7) - 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

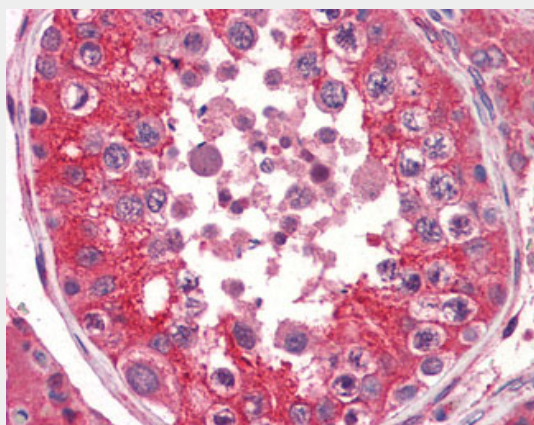
Expressed in brain and glioma tissue and glioma cell lines (at protein level). Expressed most highly in tissues that contain a high proportion of epithelial cells, e.g. skin, intestine, lung, and ovary.

EPHA2 / EPH Receptor A2 Antibody (aa559-976, clone 3D7) - Protocols

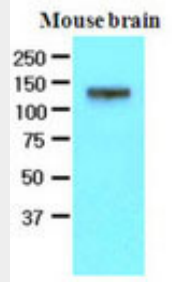
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

EPHA2 / EPH Receptor A2 Antibody (aa559-976, clone 3D7) - Images



Anti-EPHA2 antibody IHC of human testis.



The extracts of mouse brain (50 ug) were resolved by SDS-PAGE, transferred to NC membrane and...

EPHA2 / EPH Receptor A2 Antibody (aa559-976, clone 3D7) - Background

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EPHA2 / EPH Receptor A2 Antibody (aa559-976, clone 3D7) - 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).