

# Anti-Human Ephrin Type A receptor 2 (1C1), Human IgG1 Antibody Catalog # ABV11789

## **Specification**

## Anti-Human Ephrin Type A receptor 2 (1C1), Human IgG1 Antibody - Product Information

Application WB, FC, E
Primary Accession P29317
Reactivity Human
Host

Host Recombinant Clonality Monoclonal

Isotype Human IgG1, kappa Calculated MW 108266

Anti-Human Ephrin Type A receptor 2 (1C1), Human IgG1 Antibody - Additional Information

**Gene ID** 1969

Alias Symbol EPHA2

**Other Names** 

EphA2, Epithelial cell kinase, Tyrosine-protein kinase receptor ECK

**Appearance** Colorless liquid

#### **Formulation**

 $200~\mu g$  affinity purified human antibody in phosphate-buffered saline (PBS) containing 0.02% Proclin 300

#### **Reconstitution & Storage**

-20 °C

#### **Background Descriptions**

## **Precautions**

Anti-Human Ephrin Type A receptor 2 (1C1), Human IgG1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Anti-Human Ephrin Type A receptor 2 (1C1), Human IgG1 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-Human Ephrin Type A receptor 2 (1C1), Human IgG1 Antibody - Protocols

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-Human Ephrin Type A receptor 2 (1C1), Human IgG1 Antibody - Images

## Anti-Human Ephrin Type A receptor 2 (1C1), Human IgG1 Antibody - Background

This antibody binds to human Ephrin type-A receptor 2, a receptor tyrosine kinase that binds to membrane-bound ephrin-A ligands residing on adjacent cells, triggering contact-dependent signaling into neighboring cells. Involved in pattern formation during development, angiogenesis and osteoblastogenesis. Eph2A has also been found to be expressed in a variety of cancers. This antibody acts as an agonist of Eph2A signaling.