

### Anti-Ephrin A5 Antibody

Rabbit polyclonal antibody to Ephrin A5 Catalog # AP60273

### Specification

# Anti-Ephrin A5 Antibody - Product Information

Application Primary Accession Other Accession Reactivity

Host Clonality Calculated MW WB, FC, IF/IC, IHC <u>P52803</u> <u>008543</u> Human, Mouse, Rat, Rabbit, Chicken, Bovine Rabbit Polyclonal 26297

## **Anti-Ephrin A5 Antibody - Additional Information**

Gene ID 1946

Other Names EPLG7; LERK7; Ephrin-A5; AL-1; EPH-related receptor tyrosine kinase ligand 7; LERK-7

Target/Specificity Recognizes endogenous levels of Ephrin A5 protein.

Dilution WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500), FC (1/100 - 1/200) FC~~1:10~50 IF/IC~~N/A IHC~~1:100~500

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

# Anti-Ephrin A5 Antibody - Protein Information

Name EFNA5

Synonyms EPLG7, LERK7

#### Function

Cell surface GPI-bound ligand for Eph receptors, a family of receptor tyrosine kinases which are crucial for migration, repulsion and adhesion during neuronal, vascular and epithelial development. Binds promiscuously Eph receptors 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. Induces compartmentalized signaling within a caveolae-like membrane microdomain when bound to the extracellular domain of its cognate receptor. This signaling event requires the activity of the Fyn tyrosine kinase. Activates the EPHA3 receptor to regulate cell-cell adhesion and cytoskeletal organization. With the receptor EPHA2 may regulate lens fiber cells shape and interactions and be important for lens transparency maintenance. May function actively to stimulate axon fasciculation. The interaction of EFNA5 with EPHA5 also mediates communication between pancreatic islet cells to regulate glucose-stimulated insulin secretion. Cognate/functional ligand for EPHA7, their interaction regulates brain development modulating cell-cell adhesion and repulsion.

#### **Cellular Location**

Cell membrane; Lipid-anchor, GPI-anchor. Membrane, caveola; Lipid-anchor, GPI-anchor. Note=Compartmentalized in discrete caveolae-like membrane microdomains

## Anti-Ephrin A5 Antibody - Protocols

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

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

### Anti-Ephrin A5 Antibody - Images



Western blot analysis of Ephrin A5 expression in mouse heart (A), rat heart (B), rat kidney (C) whole cell lysates.





Immunohistochemical analysis of Ephrin A5 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Ephrin A5 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

# Anti-Ephrin A5 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Ephrin A5. The exact sequence is proprietary.