

## EFNA1 / Ephrin A1 Antibody (aa66-115)

Rabbit Polyclonal Antibody Catalog # ALS15756

## **Specification**

## EFNA1 / Ephrin A1 Antibody (aa66-115) - Product Information

Application IHC, IF, WB Primary Accession P20827

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 24kDa KDa

## EFNA1 / Ephrin A1 Antibody (aa66-115) - Additional Information

#### **Gene ID** 1942

#### **Other Names**

Ephrin-A1, EPH-related receptor tyrosine kinase ligand 1, LERK-1, Immediate early response protein B61, Tumor necrosis factor alpha-induced protein 4, TNF alpha-induced protein 4, Ephrin-A1, secreted form, EFNA1, EPLG1, LERK1, TNFAIP4

## **Target/Specificity**

EFNA1 Antibody detects endogenous levels of total EFNA1 protein.

# **Reconstitution & Storage**

Store at -20°C for up to one year.

#### **Precautions**

EFNA1 / Ephrin A1 Antibody (aa66-115) is for research use only and not for use in diagnostic or therapeutic procedures.

#### EFNA1 / Ephrin A1 Antibody (aa66-115) - Protein Information

#### Name EFNA1

Synonyms EPLG1, LERK1, TNFAIP4

#### **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. Plays an important role in angiogenesis and tumor neovascularization. The recruitment of VAV2, VAV3 and PI3-kinase p85 subunit by phosphorylated EPHA2 is critical for EFNA1-induced RAC1 GTPase activation and vascular endothelial cell migration and assembly. Exerts anti-oncogenic effects in tumor cells through activation and down- regulation of EPHA2. Activates EPHA2 by inducing tyrosine phosphorylation which leads to its internalization and degradation. Acts as a negative regulator in



the tumorigenesis of gliomas by down- regulating EPHA2 and FAK. Can evoke collapse of embryonic neuronal growth cone and regulates dendritic spine morphogenesis.

#### **Cellular Location**

Cell membrane; Lipid-anchor, GPI-anchor

#### **Tissue Location**

Brain. Down-regulated in primary glioma tissues compared to the normal tissues. The soluble monomeric form is expressed in the glioblastoma multiforme (GBM) and breast cancer cells (at protein level).

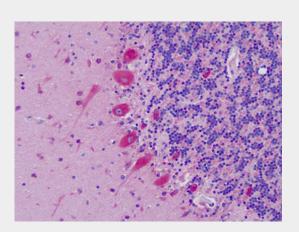
**Volume** 50 μl

## EFNA1 / Ephrin A1 Antibody (aa66-115) - Protocols

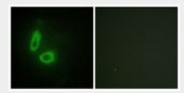
Provided below are standard protocols that you may find useful for product applications.

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

# EFNA1 / Ephrin A1 Antibody (aa66-115) - Images

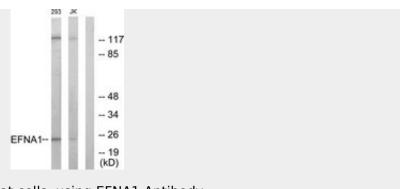


Human, Brain, Cerebellum: Formalin-Fixed Paraffin-Embedded (FFPE)



Immunofluorescence of HeLa cells, using EFNA1 Antibody.





Western blot of extracts from 293/Jurkat cells, using EFNA1 Antibody.

# EFNA1 / Ephrin A1 Antibody (aa66-115) - Background

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. Plays an important role in angiogenesis and tumor neovascularization. The recruitment of VAV2, VAV3 and PI3-kinase p85 subunit by phosphorylated EPHA2 is critical for EFNA1-induced RAC1 GTPase activation and vascular endothelial cell migration and assembly. Exerts anti-oncogenic effects in tumor cells through activation and down-regulation of EPHA2. Activates EPHA2 by inducing tyrosine phosphorylation which leads to its internalization and degradation. Acts as a negative regulator in the tumorigenesis of gliomas by down-regulating EPHA2 and FAK. Can evoke collapse of embryonic neuronal growth cone and regulates dendritic spine morphogenesis.

## EFNA1 / Ephrin A1 Antibody (aa66-115) - References

Holzman L.B.,et al.Mol. Cell. Biol. 10:5830-5838(1990). Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Gregory S.G.,et al.Nature 441:315-321(2006). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Zhang Z.,et al.Protein Sci. 13:2819-2824(2004).