

EFNA1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50678**Specification**

EFNA1 Antibody - Product Information

Application	IF, WB
Primary Accession	P20827
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24 21 KDa
Antigen Region	83-115

EFNA1 Antibody - 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

Dilution

IF~~1:100

WB~~1:1000

Format

Rabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions

-20°C

EFNA1 Antibody - 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

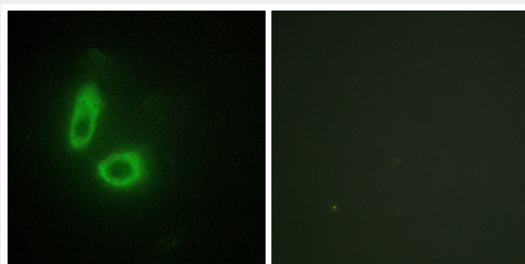
Tissue Location

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).

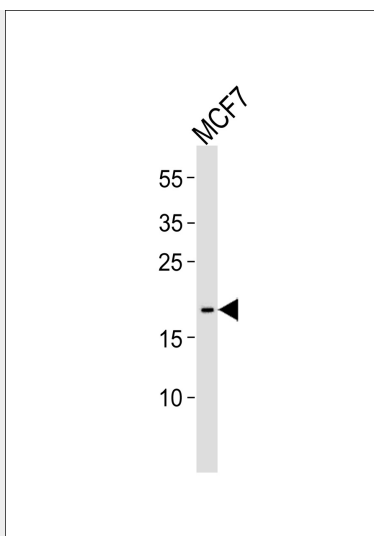
EFNA1 Antibody - Protocols

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

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

EFNA1 Antibody - Images

Immunofluorescence analysis of HeLa cells, using EFNA1 antibody.



Western blot analysis of lysate from MCF7 cell line, using EFNA1 Antibody (AP50678). AP50678 was diluted at 1:1000. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35 µg.

EFNA1 Antibody - 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 Antibody - References

Holzman L.B., et al. Mol. Cell. Biol. 10:5830-5838(1990).
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Gregory S.G., et al. Nature 441:315-321(2006).
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Zhang Z., et al. Protein Sci. 13:2819-2824(2004).