Active Ephrin A1 (EFNA1)

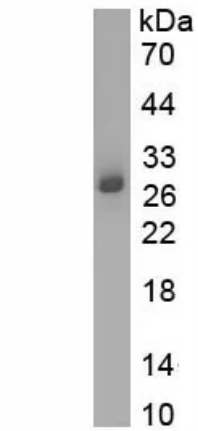
Catalog#:PEH12922

概述（Summary）

别称（Alternative Names）	B61; ECKLG; EFL1; EPLG1; LERK1; TNFAIP4; EPH-related receptor tyrosine kinase ligand 1; Tumor necrosis factor alpha-induced protein 4; Immediate early response protein B61
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Asp19-Ser182】
Accession #	P20827
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	23.1 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	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.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

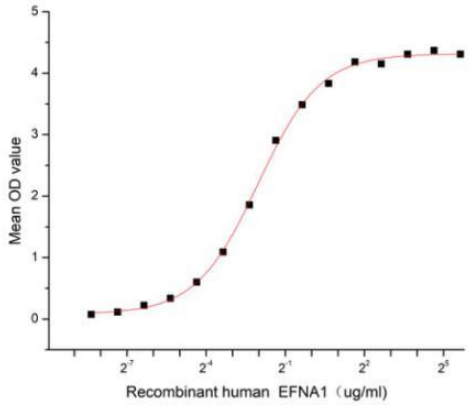


Figure 1. The binding activity of recombinant human EFNA1 and recombinant mouse EPHA1

Ephrin-A1 (EFNA1), also known as EPLG1, LERK1, TNFAIP4, Immediate early response protein B61, is a member of the A-type ephrin family of cell surface proteins that function as ligands for the A-type Eph receptor tyrosine kinase family. EFNA1 plays an important role in angiogenesis and tumor neovascularization. EFNA1 widely affects tumor growth through enhancing tumor angiogenesis, malignant cell events and invasiveness. Ephrin Type A Receptor 1 (EPHA1) is one of high-affinity ligands for EFNA1, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human EFNA1 and recombinant

mouse EPHA1. Briefly, biotin-linked EFNA1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to EPHA1-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µl stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant human EFNA1 and recombinant mouse EPHA1 was shown in Figure 1, the EC50 for this effect is 0.24 ug/mL.

注意事项（Note）

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