Active Ephrin A5 (EFNA5)

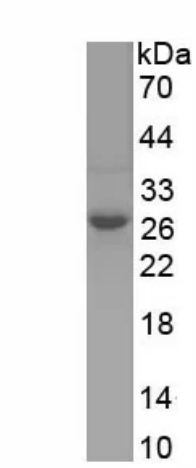
Catalog#:PEH12927

概述（Summary）

别称（Alternative Names）	AF1; EFL5; EPLG7; GLC1M; LERK7; RAGS; AL-1; EPH-related receptor tyrosine kinase ligand 7
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Gln21-Asn203】
Accession #	P52803
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	24.9 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. 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.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

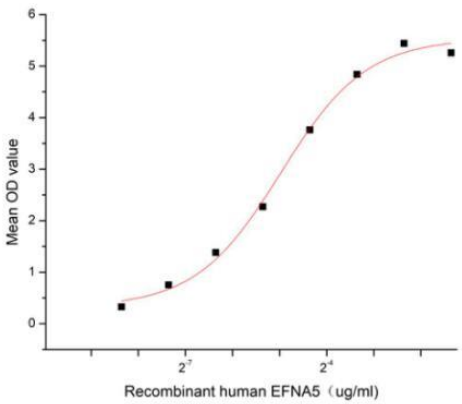


Figure 1. The binding activity of recombinant human EFNA5 and recombinant human EPHA10

Ephrin-A5, also known as EFNA5, is a member of the Ephrin family. EFNA5 is localized in cell membranes and was highly expressed in skin, brain, spleen, kidney, heart and fat. EFNA5 can bind to its receptors to play important physiological functions,

such as participating in neurogenesis, angiogenesis, promoting cell proliferation and differentiation, balancing glucose homeostasis, maintaining lens development, regulating female mammalian reproduction, and mobilizing fat thermogenesis. EPHA10 is a receptor for members of the ephrin-A family. It binds to EFNA3, EFNA4 and EFNA5. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human EFNA5 and recombinant human EPHA10. Briefly, EFNA5 was diluted serially in PBS with 0.01% BSA (pH7.4). Duplicate samples of 100 µl were then transferred to EPHA10-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-EFNA5 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, 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 450/630 nm immediately. The binding activity of recombinant human EFNA5 and recombinant human EPHA10 was shown in Figure 1, the EC50 for this effect is 0.03 ug/mL.

注意事项（Note）

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