Datasheet for ABIN7317451

EPH Receptor B1 Protein (EPHB1) (AA 1-540) (His tag)

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Overview

Quantity:	50 µg
Target:	EPH Receptor B1 (EPHB1)
Protein Characteristics:	AA 1-540
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This EPH Receptor B1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human EphB1/EPHT2 Protein (aa 1-540, His Tag)(Active)
Sequence:	Met 1-Pro 540
Characteristics:	A DNA sequence encoding the human EPHB1 (P54762-1) extracellular domain (Met 1-Pro 540) was expressed, with a polyhistidine tag at the C-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Measured by its binding ability in a functional ELISA.Immobilized human EPHB1-His at 10 µg/ml (100 µl/well) can bind human EFNB1-Fc2h with a linear ranger of 3.125-200 ng/mL.Immobilized human EPHB1-His at 10 µg/ml (100 µl/well) can bind human EFNB2-Fch with a linear ranger of 0.3125-20 ng/mL.

Target Details

Target:	EPH Receptor B1 (EPHB1)
Alternative Name:	EphB1/EPHT2 (EPHB1 Products)
Background:	Background: Ephrin type-B receptor 1, also known as EphB1, belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family which 16 known receptors (14 found in mammals) are involved: EPHA1, EPHA2, EPHA3, EPHA4, EPHA5, EPHA6, EPHA7, EPHA8, EPHA9, EPHA10, EPHB1, EPHB2, EPHB3, EPHB4, EPHB5, EPHB6. EphB2 receptor tyrosine kinase phosphorylates syndecan-2 and that this phosphorylation event is crucial for syndecan-2 clustering and spine formation. The Eph family of receptor tyrosine kinases (comprising EphA and EphB receptors) has been implicated in synapse formation and the regulation of synaptic function and plasticity6. Ephrin receptors are components of cell signalling pathways involved in animal growth and development, forming the largest sub-family of receptor tyrosine kinases (RTKs). Ligand-mediated activation of Ephs induce various important downstream effects and Eph receptors have been studied for their potential roles in the development of cancer. EphB receptor tyrosine kinases are enriched at synapses, suggesting that these receptors play a role in synapse formation or function. We find that EphrinB binding to EphB induces a direct interaction of EphB with NMDA-type glutamate receptors. This interaction occurs at the cell surface and is mediated by the extracellular regions of the two receptors, but does not require the kinase activity of EphB. Synonym: Ephrin Type-A Receptor 7, EPH Homology Kinase 3, EHK-3, EPH-Like Kinase 11, EK11, hEK11, EPHA7, EHK3, HEK11
Molecular Weight:	60 kDa
Pathways:	RTK Signaling

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4, 5 % glycerol
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Handling

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.