

Recombinant Human EphB1/EPHT2 Protein (aa 565-984, His & GST Tag)

Catalog No. PKSH030344

Note: Centrifuge before opening to ensure complete recovery of vial contents.

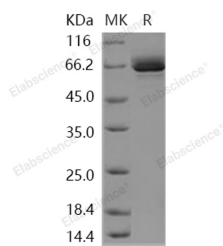
Description

Synonyms	Ephrin Type-A Receptor 7;EPH Homology Kinase 3;EHK-3;EPH-Like Kinase 11;EK11;hEK11;EPHA7;EHK3;HEK11
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Arg565-Ala984
Accession	AAI11745.1
Calculated Molecular Weight	75.3 kDa
Observed molecular weight	66 kDa
Tag	N-His-GST
Bioactivity	The specific activity was determined to be 140 nmol/min/mg using Poly(Glu:Tyr) 4:1 as substrate.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as sterile solution of 20mM Tris, 500mM NaCl, 3mM DTT, pH 8.0, 10% glycerol
Reconstitution	Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

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

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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.

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