Recombinant Human EphB2 Protein (His Tag)

Catalog Number: PKSH031441

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

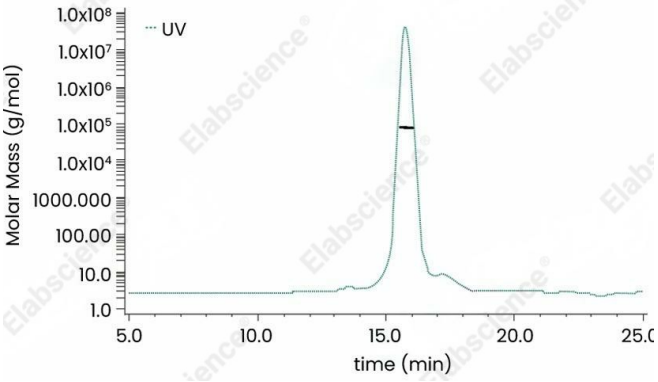
Description

Species	Human
Source	HEK293 Cells-derived Human EphB2 protein Met 1-Leu 543, with an C-terminal His
Calculated MW	59.7 kDa
Observed MW	70-75 kDa
Accession	NP_059145.2
Bio-activity	Measured by its ability to bind recombinant human EphrinB2/Fc chimera in a functional ELISA.

Properties

Purity	> 98% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. 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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



The purity of Recombinant Human EphB2 Protein,His Tag,HPLC-verified(Cat: PKSH031441)was more than 90% and the molecular weight of this protein is around 69.4 kDa verified by SEC-MALS.

Background

Ephrin type-B receptor 2; also known as EphB2; 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.

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