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Datasheet for ABIN7317769

## EPH Receptor B2 Protein (EPHB2) (His tag,Fc Tag)

### Overview

Quantity:	100 µg
Target:	EPH Receptor B2 (EPHB2)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This EPH Receptor B2 protein is labelled with His tag,Fc Tag.

### Product Details

Purpose:	Recombinant Human EphB2 Protein (His & Fc Tag)(Active)
Sequence:	Met 1-Leu 543
Characteristics:	A DNA sequence encoding the extracellular domain (Met 1-Leu 543) of human EphB2 (NP_059145.2) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.
Purity:	> 90 % 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 ability to bind recombinant human EphrinB2 in a functional ELISA.

### Target Details

Target:	EPH Receptor B2 (EPHB2)
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## Target Details

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Alternative Name: EphB2 ([EPHB2 Products](#))

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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 plasticity<sup>6</sup>. 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: CAPB,DRT,EK5,EPHT3,ERK,Hek5,PCBC,Tyro5

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Molecular Weight: 86 kDa

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NCBI Accession: [NP\\_059145](#)

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Pathways: [RTK Signaling](#), [Regulation of long-term Neuronal Synaptic Plasticity](#), [S100 Proteins](#)

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## Application Details

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Restrictions: For Research Use only

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## Handling

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Format: Lyophilized

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Reconstitution: Please refer to the printed manual for detailed information.

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Buffer: Lyophilized from sterile PBS, pH 7.4

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Storage: 4 °C,-20 °C,-80 °C

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Storage Comment: 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.