

Datasheet for ABIN7320010

**EPH Receptor B1 Protein (EPHB1) (GST tag,His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	50 µg
Target:	EPH Receptor B1 (EPHB1)
Origin:	Mouse
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This EPH Receptor B1 protein is labelled with GST tag,His tag.

## Product Details

Purpose:	Recombinant Mouse EphB1/EPHT2 Protein (His & GST Tag)(Active)
Sequence:	Met 591-Ala 984
Characteristics:	A DNA sequence encoding the cytoplasmic domain (Met 591-Ala 984) of mouse EPHB1 (Q8CBF3-1) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 80 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	The specific activity was determined to be 234 nmol/min/mg using Poly(Glu,Tyr) 4:1 as substrate.

## Target Details

Target:	EPH Receptor B1 (EPHB1)
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## Target Details

Alternative Name: EphB1/EPHT2 ([EPHB1 Products](#))

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 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:

9330129L11,AW488255,C130099E04Rik,Cek6,Elk,Elkh,ENSMUSG00000074119,Hek6,Net

Molecular Weight: 72.4 kDa

Pathways: [RTK Signaling](#)

## Application Details

Restrictions: For Research Use only

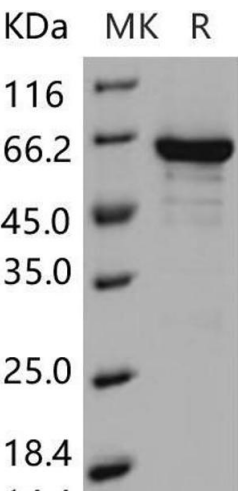
## Handling

Format: Frozen, Liquid

Buffer: Supplied as sterile 20 mM Tris, 500 mM NaCl, pH 8.0, 10 % glycerol

Storage: -20 °C

Storage Comment: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.



**Western Blotting**

**Image 1.**