

Recombinant Mouse EphB3/HEK2 Protein (His Tag)

Catalog No. PKSM040600

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

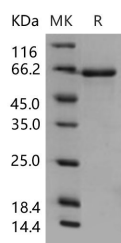
Description

Synonyms	AW456895;Cek10;Etk2;HEK2;MDK5;Sek4;Tyro6
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met 1-Thr 537
Accession	NP_034273.1
Calculated Molecular Weight	57.0 kDa
Observed molecular weight	63 kDa
Tag	C-His
Bioactivity	Immobilized mouse EphB3 at 2 µg/ml (100 µl/well) can bind mouse EFNB1 with a linear range of 0.1-12.5 ng/ml.

Properties

Purity	> 94 % 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 20mM Tris, 150mM NaCl, pH 7.55% trehalose, 5% mannitol and 0.01% Tween 80. 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



> 94 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Ephrin type-B receptor 3, also known as EphB3 or HEK2, 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. 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.