



Recombinant Protein Technical Manual

Recombinant Mouse EphB3/HEK2 Protein (His Tag)(Active)
RPES2232

Product Data:

Product SKU: RPES2232

Size: 100µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_034273.1

Protein Information:

Molecular Mass: 57 kDa

AP Molecular Mass: 63 kDa

Tag: C-His

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized mouse EphB3 at 2 µg/ml (100 µl/well) can bind mouse EFNB1 with a linear range of 0.12.5 ng/ml.

Purity: > 94 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: 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 7.5

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

Application: Functional ELISA

Synonyms: AW456895;Cek10;Etk2;HEK2;MDK5;Sek4;Tyro6

Immunogen Information:

Sequence: Met 1-Thr 537

Background:

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.