

Recombinant Rat EphA4 Protein (His Tag)

Catalog Number: PKSR030355

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

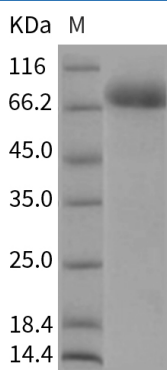
Description

Species	Rat
Source	HEK293 Cells-derived Rat EphA4 protein Met1-Thr547, with an C-terminal His
Calculated MW	59.8 kDa
Observed MW	71 kDa
Accession	D3ZZK3
Bio-activity	Measured by its binding ability in a functional ELISA. Immobilized recombinant Rat EPHA4 Protein (His Tag) at 10 µg/mL (100 µl/well) can bind Recombinant rat EFNA5-Fc with a linear range of 7.8-12.5 ng/ml.

Properties

Purity	> 97 % 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



> 97 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

EPH receptor A4 (ephrin type-A receptor 4), also known as EphA4, 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. EphA4 is enriched on dendritic spines of pyramidal neurons in the adult mouse hippocampus, and ephrin-A3 is localized on astrocytic processes that envelop spines. Eph receptor-mediated signaling, which is triggered by ephrins⁷, probably modifies the properties of synapses during synaptic activation and remodeling. Ephrin receptors are components of cell signalling pathways involved in animal growth and development, forming the largest sub-family of receptor tyrosine kinases (RTKs). The extracellular domain of an EphA4 interacts with ephrin ligands, which may be tethered to neighbouring cells. 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.