Recombinant Human EphA4 Protein (aa 570-986, His &GSTTag)

Catalog Number: PKSH030369

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

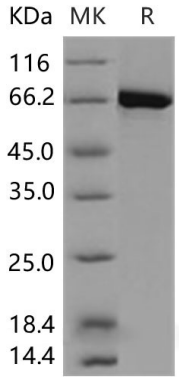
Description

Species	Human
Source	Baculovirus-Insect Cells-derived Human EphA4 protein Ser 570-Val 986, with an N-terminal His & GST
Calculated MW	75.0 kDa
Observed MW	67 kDa
Accession	P54764
Bio-activity	1. The specific activity was determined to be 17 nmol/min/mg using Poly(Glu:Tyr) 4:1 as substrate. 2. Immobilized human EPHA4 (aa 570-986)at 10 μg/ml (100 μl/well) can bind biotinylated human EphrinA5-His with a linear range of 0.625-5.0 μg/ml.

Properties

Purity	> 99 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as sterile solution of 20mM Tris, 500mM NaCl, pH 8.5, 10% glycerol, 3mM DTT

Data



> 99 % as determined by reducing SDS-PAGE.

Background

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&minu s;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.