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

Catalog No. PKSH030369

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

Description		
Synonyms	Ephrin type-A receptor 4;HEK8;SEK;TYRO1;EPHA4;Tyrosine-protein kinase receptor SEK;Tyrosine-protein kinase TYRO1;EK8;hEK8;EPH-like kinase 8	
Species	Human	
Expression Host	Baculovirus-Insect Cells	
Sequence	Ser 570-Val 986	
Accession	P54764	
Calculated Molecular Weight	75.0 kDa	
Observed molecular weight	67 kDa	
Tag	N-His-GST	
Bioactivity	 The specific activity was determined to be 17 nmol/min/mg using Poly(Glu:Tyr) 4:1 as substrate. 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.	
Endotoxin	< 1.0 EU per μ g of the protein as determined by the LAL method.	
Storage	Store at $< -20^{\circ}$ 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 $< -20^{\circ}$ C.	
Formulation	Supplied as sterile solution of 20mM Tris, 500mM NaCl, pH 8.5, 10% glycerol, 3mM DTT	
Reconstitution	Not Applicable	
Data		

KDa	MK	R
116 66.2	-	_
45.0 35.0	-	
25.0	-	
18.4 14.4	-	

> 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

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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.