## Recombinant Mouse EphA4/HEK8 Protein (His Tag)

Catalog Number: PKSM040603



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

Description	
Synonyms	2900005C20Rik;AI385584;Cek8;Hek8;rb;Sek;Sek1;Tyro1
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met 1-Thr 547
Accession	NP_031962.2
Calculated Molecular Weight	60.0 kDa
Observed molecular weight	65 kDa
Tag	C-His
Bioactivity	Immobilized mouse EPHA4 at 2 $\mu$ g/ml (100 $\mu$ l/well) can bind mouse EFNA5 with a linear ranger of 1. 28-32 ng/ml.
Properties	
Purity	> 98 % 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% Tween80 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	
KDa MK F 116 66.2 45.0 35.0 25.0	

> 98 % as determined by reducing SDS-PAGE.

18.4 14.4

## **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–mediated

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Catalog Number: PKSM040603



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.

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine
Toll-free: 1-888-852-8623 Tel: 1-832-243-6086
Web: www.elabscience.com Email: techsupport@elabscience.com