## Recombinant Mouse EphA7/EHK3 Protein (His Tag)

## Catalog Number: PKSM040593

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

Description		
Species	Mouse	
Source	HEK293 Cells-derived Mouse EphA7/EHK3 protein Met 1-Ile 556, with an C-terminal	
	His	
Calculated MW	60.4 kDa	
Observed MW	70 kDa	
Accession	Q61772-1	
<b>Bio-activity</b>	Immobilized mouse EphA7 at 2 $\mu$ g/ml (100 $\mu$ l/well) can bind mouse EphrinA4 with a	
	linear range of 0.08-10 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 $< -20^{\circ}$ 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		
KE	Da MK R	

КDa	IVIIX	IX.
116	-	
66.2	- '	-
45.0	-	
35.0	-	
25.0	-	
18.4	-	
14.4	-	

> 97 % as determined by reducing SDS-PAGE.

Background

## **Elabscience**®

Ephrin type-A receptor 7, also known as EphA7, 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. 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 (RTK s). 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. Down-regulation of EphA7 secondary to hypermethylation has been reported in colorectal cancer. The expression of EphA7 was reduced in all tested gastric cancer cell lines; however, there is marked variability in expression among gastric carcinoma specimens. EphA7 may have roles in the pathogenesis and development of gastric carcinomas.