# **Elabscience**®

### Recombinant Human EphA1 Protein (His Tag)

#### Catalog Number: PKSH033690

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

Description		
Species	Human	
Source	HEK293 Cells-derived Human EphA1 protein Lys26-Glu547, with an C-terminal His	
Calculated MW	57.4 kDa	
Observed MW	70-85 kDa	
Accession	AAI30292.1	
Bio-activity	Not validated for activity	
Properties		
Purity	>95% 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 a 0.2 µm filtered solution of 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

kDa	MK	R
120 90		
60	-	
40		
30		
20	-	an and

> 95 % as determined by reducing SDS-PAGE.

Background

# **Elabscience**®

Ephrin type-A receptor 1/EphA1 is a glycosylated member of the Eph family of transmembrane receptor tyrosine kinases. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. The A and B classes of Eph proteins are distinguished by Ephrin ligand binding preference but have a common structural organization. Eph-Ephrin interactions are widely involved in the regulation of cell migration, tissue morphogenesis, and cancer progression. EphA1 can form pH sensitive cishomodimers on the cell surface. Membrane-bound or clustered Ephrin ligands interact with EphA1 and activate its kinase domain which is capable of Ser, Thr, and Tyr phosphorylation. Reverse signaling is propagated through the Ephrin ligand. EphA1 is widely expressed in differentiated epithelial cells, particularly in bone marrow, spleen, thymus, and testes. EphA1 is upregulated or downregulated in a variety of human carcinomas and is implicated in tumor invasiveness.