## **Elabscience**®

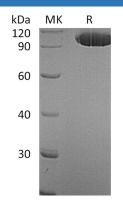
### Recombinant Human EphA2 Protein (Fc Tag)

#### Catalog Number: PKSH032384

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

Description	
Species	Human
Source	HEK293 Cells-derived Human EphA2 protein Ala24-Asn534, with an C-terminal Fc
Calculated MW	83.0 kDa
Observed MW	90-120 kDa
Accession	P29317
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



> 95 % as determined by reducing SDS-PAGE.

Background

# **Elabscience**®

Ephrin type-A receptor 2/EphA2 is a member of the Eph receptor tyrosine kinase family which binds Ephrins A1; 2; 3; 4; and 5. A and B class Eph proteins have a common structural organization. Receptor tyrosine kinase which binds promiscuously membrane-bound ephrin-A family ligands residing on adjacent cells; leading to contact-dependent bidirectional signaling into neighboring cells. 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. EphA2 becomes autophosphorylated following ligand binding and then interacts with SH2 domain-containing PI3-kinase to activate MAPK pathways. Reverse signaling is also propagated through the Ephrin ligand. Transcription of EphA2 is dependent on the expression of E-Cadherin; and can be induced by p53 family transcription factors. EphA2 is upregulated in breast; prostate; and colon cancer vascular endothelium. Its ligand; EphrinA1; is expressed by the local tumor cells. In some cases; EphA2 and EphrinA1 are expressed on the same blood vessels. EphA2 signaling cooperates with VEGF receptor signaling in promoting endothelial cell migration.