

**Product Data:****Product SKU:** RPES2191**Size:** 100µg**Species:** Mouse**Expression host:** HEK293 Cells**Uniprot:** NP\_034269.2**Protein Information:****Molecular Mass:** 58 kDa**AP Molecular Mass:** 65 kDa**Tag:** C-His**Bio-activity:** Measured by its binding ability in a functional ELISA.1. Immobilized mouse EphA2 at 2µg/ml (100 µl/well) can bind mouse EphrinA1 with a linear range of 0.16-20 ng/ml.2. Immobilized mouse EphA2 at 2 µg/ml (100 µl/well) can bind human EphrinA1 with a linear**Purity:** > 98 % as determined by SDS-PAGE**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.**Storage:** 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 20mM Tris, 150mM NaCl, pH 7.5**Reconstitution:** Please refer to the printed manual for detailed information.**Application:** Functional ELISA**Synonyms:** AW545284;Eck;Myk2;Sek-2;Sek2

## Immunogen Information:

**Sequence:** Met 1-Asn 535

## Background:

Eph receptor A2 (Ephrin type-A receptor 2 or EphA2) is a member of the ephrin receptor subfamily of the protein-tyrosine kinase family. The Eph receptors' corresponding family of ligands are the ephrins anchored to cell surfaces. The ephrins and Eph receptors are implicated as positional labels that may guide the development of neural topographic maps. They have also been found implicated in embryonic patterning, neuronal targeting, vascular development and adult neovascularization. The large family of ligands and receptors may make a major contribution to the accurate spatial patterning of connections and cell position in the nervous system. Furthermore, elevated expression of Eph receptors and ephrin ligands is associated with tumors and associated tumor vasculature, suggesting the Eph receptors and ephrin ligands also play critical roles in tumor angiogenesis and tumor growth. Unlike most Eph kinases, which are primarily expressed during development, EphA2 is primarily found in adult human epithelial cells. The cellular functions of EphA2 may be regulating cell growth, survival, migration, and angiogenesis. Unlike other receptor tyrosine kinases, ligand binding is not necessary for EphA2. Rather, the ligand appears to regulate EphA2 subcellular localization and its interactions with downstream adapter and signaling proteins. Eph receptor A2(EphA2) has been demonstrated to critically regulate tumor cell growth, migration and invasiveness. Eph receptor A2(EphA2) is frequently overexpressed and functionally altered in aggressive tumor cells, and that these changes promote metastatic character.