

Recombinant Protein Technical Manual Recombinant Human EphA1 Protein (His Tag)

RPES2956

Product Data:

Product SKU: RPES2956 **Size:** 10μg

Species: Human Cells

Uniprot: P21709

Protein Information:

Molecular Mass: 57.4 kDa

AP Molecular Mass: 80-85 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 a 0.2 μm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Ephrin type-A receptor 1; hEpha1; EPH tyrosine kinase; EPH tyrosine kinase 1;

Erythropoietin-producing hepatoma receptor; Tyrosine-protein kinase receptor

EPH; EPHA1; EPH; EPHT1

Immunogen Information:

Sequence: Lys26-Glu547

Background:

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.