



## Recombinant Protein Technical Manual

**Recombinant Human EphB1/EPHT2 Protein (aa 564-984, His Tag)(Active)**  
RPES2919

### Product Data:

**Product SKU:** RPES2919

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P54762

### Protein Information:

**Molecular Mass:** 48.8 kDa

**AP Molecular Mass:** 49 kDa

**Tag:** C-His

**Bio-activity:** Immobilized Human EphB1-His at 10µg/ml(100 µl/well) can bind Mouse EFNB2-Fc(Cat: PKSM041012). The ED50 of Human EphB1-His is 53.1 ug/ml .

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

**Endotoxin:** < 1.0 EU per µg 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 20mM Tris,150mM NaCl,pH8.0.

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

**Application:** Functional ELISA

**Synonyms:** Ephrin Type-B Receptor 1; ELK; EPH Tyrosine Kinase 2; EPH-Like Kinase 6; EK6; hEK6; Neuronally-Expressed EPH; Related Tyrosine Kinase; NET; Tyrosine-Protein Kinase Receptor EPH-2; EPHB1; ELK; EPHT2; HEK6

## Immunogen Information:

**Sequence:** Ser564-Ala984

## Background:

Ephrin Type-B Receptor 1 (EPHB1) is a single-pass type I membrane protein that belongs to the Ephrin-B family of receptor tyrosine kinases that is involved in embryonic nervous and vascular system development. EPHB1/EPHT2 contains two fibronectin type-III domains, one protein kinase domain and one SAM (sterile  $\alpha$  motif) domain. EPHB1 could stimulate fibroblast motility on extracellular matrix in a kinase-dependent manner, which also correlated with its association with Grb7, an adaptor molecule implicated in the regulation of cell migration. It binds to ephrin-B1, ephrin-B2 and ephrin-B3. EPHB1 plays an important roles in diverse biological processes including nervous system development, angiogenesis, and neural synapsis formation and maturation and may be involved in cell-cell interactions in the nervous system.