



Recombinant Protein Technical Manual

Recombinant Human Ephrin-B1/EFNB1 Protein (His & Fc Tag)(Active)
RPES0174

Product Data:

Product SKU: RPES0174

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_004420.1

Protein Information:

Molecular Mass: 51.2 kDa

AP Molecular Mass: 64 & 36 kDa

Tag: C-His & Fc

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized mouse EphB3 at 2 µg/ml (100 µl/well) can bind human EFNB1 Fc chimera with a linear ranger of 1.56-25 ng/ml.

Purity: >(79.7+18.0) % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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 PBS, pH 7.4

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

Application: Functional ELISA

Synonyms: Ephrin-B1;EFL-3; ELK ligand; EPH-related receptor tyrosine kinase ligand 2;LERK-2;CFND;CFNS;EFB1;EFL3;Elk-L;EPLG2;LERK2

Immunogen Information:

Sequence: Met 1-Gly 232

Background:

Ephrin-B1 also known as EFNB1, is a member of the ephrin family. The transmembrane-associated ephrin ligands and their Eph family of receptor tyrosine kinases are expressed by cells of the SVZ. Eph/ephrin interactions are implicated in axon guidance, neural crest cell migration, establishment of segmental boundaries, and formation of angiogenic capillary plexi. Eph receptors and ephrins are divided into two subclasses, A and B, based on binding specificities. Ephrin subclasses are further distinguished by their mode of attachment to the plasma membrane: ephrin-A ligands bind EphA receptors and are anchored to the plasma membrane via a glycosylphosphatidylinositol (GPI) linkage, whereas ephrin-B ligands bind EphB receptors and are anchored via a transmembrane domain. An exception is the EphA4 receptor, which binds both subclasses of ephrins. EphrinB1 and B class Eph receptors provide positional cues required for the normal morphogenesis of skeletal elements. Another malformation, preaxial polydactyly, was exclusively seen in heterozygous females in which expression of the X-linked ephrinB1 gene was mosaic, so that ectopic EphB-ephrinB1 interactions led to restricted cell movements and the bifurcation of digital rays.