Recombinant EFNB1 protein (His tag)

Catalog Number	542522
Synonyms	EFL-3; ELK ligand; ELK-L; EPH-related receptor tyrosine kinase ligand 2; LERK-2; Ephrin-B1 CTF; Ephrin-B1 ICD
Species	Human
Expression System	E. coli
Accession	P98172
Molecular Weight	Predictes a molecular mass of 17.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	28-170
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 28-170 aa (P98172) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Ephrin-B1 Fragment (28-170) is a high-purity protein preparation encompassing the complete Ephrin receptor-binding domain (RBD). This fragment serves as an essential research tool for investigating the specific molecular interactions and signaling mechanisms mediated by Ephrin-B1, a key transmembrane ligand in neuronal, vascular, and epithelial development processes. Ephrin-B1 is a cell surface transmembrane ligand that plays a crucial role in contact-dependent bidirectional signaling through interactions with Eph receptor tyrosine kinases. This protein is essential for migration, repulsion, and adhesion processes during neuronal, vascular, and epithelial development. It demonstrates high affinity for EPHB1/ELK receptor and can also bind EPHB2 and EPHB3 receptors. Ephrin-B1 is localized to the cell membrane as a single-pass type I membrane protein and is enriched in membrane raft domains, where it may recruit GRIP1 and GRIP2. The full-length protein undergoes cleavage to generate C-terminal and intracellular domain fragments, with the intracellular domain capable of nuclear localization. The recombinant fragment (28-170) specifically contains the functional receptor-binding domain, making it ideal for studying Ephrin-B1's ligand-receptor interactions without the complexities of transmembrane and intracellular regulatory domains.