

## Ephrin-B1 Active Protein | EFNB1 active protein

Ephrin-B1 Protein, Human, Recombinant (His Tag)

CATALOG #  
**AAA257948**

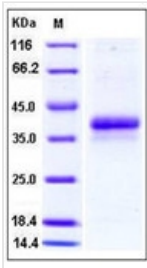
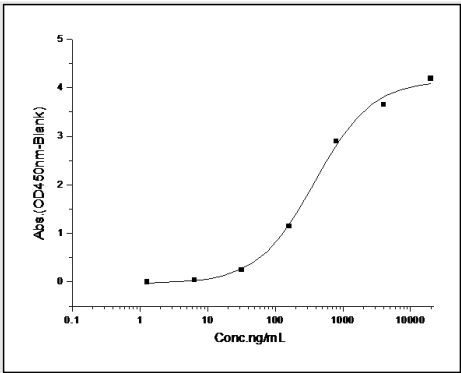
HOST  
**HEK293 Cells**

### PRODUCT SYNONYMS

Ephrin-B1; Ephrin-B1 Protein; Human; Recombinant (His Tag); Human Ephrin-B1/EFNB1 Protein (His Tag); CFND Protein; CFNS Protein; EFB1 Protein; EFL3 Protein; Elk-L Protein; EPLG2 Protein; LERK2 Protein; ephrin-B1; EFNB1 active protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | HEK293 Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Purity/Purification     | >95% as determined by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Form/Format             | Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.                                                                                                                                                                                                                                                                                                      |
| Sequence                | Met1-Lys23 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Species                 | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Activity                | <ol style="list-style-type: none"> <li>1. Measured by its binding ability in a functional ELISA.</li> <li>2. Immobilized recombinant human EphrinB1 at 10ug/ml (100uL/well) can bind human EphB6 with a linear range of 0.16-4ug/ml.</li> </ol>                                                                                                                                                                                                                                                                         |
| Endotoxin               | <1.0EU per ug of the protein as determined by the LAL method                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Predicted N Terminal    | Leu 28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Tag                     | C-His                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Protein Construction    | A DNA sequence encoding the human EFNB1 (NP_004420.1) extracellular domain (Met 1-Lys 237) was fused with a polyhistidine tag at the C-terminus.                                                                                                                                                                                                                                                                                                                                                                        |
| Reconstitution          | A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.                                                                                                                                                                                                                                                                                                                                                                                         |
| Preparation and Storage | <p>Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.</p> <p>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.</p> <p>They are shipped out with blue ice.</p> |



SDS-PAGE

**Application Data**  
Measured by its binding ability in a functional ELISA. Immobilized recombinant human EphrinB1 at 10 ug/ml (100 ul/well) can bind human EphB6 with a linear range of 0.16-4 ug/ml.

ADDITIONAL INFORMATION

|                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for EFNB1 active protein</b> | 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. |
| <b>References</b>                                           | Davy A, et al. (2004) Ephrin-B1 forward and reverse signaling are required during mouse development. Genes Dev. 18(5): 572-83. Compagni A, et al. (2003) Control of skeletal patterning by ephrinB1-EphB interactions. Dev Cell. 5(2): 217-30. Wieland I, et al. (2004) Mutations of the ephrin-B1 gene cause craniofrontonasal syndrome. Am J Hum Genet. 74(6): 1209-15.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                     |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 4758248                                                                                                             |
| NCBI GeneID                      | 1947                                                                                                                |
| NCBI Accession #                 | NP_004420.1                                                                                                         |
| NCBI GenBank Nucleotide #        | NM_004429.4                                                                                                         |
| UniProt Accession #              | P98172; D3DVU0                                                                                                      |
| Molecular Weight                 | 38,007 Da                                                                                                           |
| NCBI Official Full Name          | ephrin-B1                                                                                                           |
| NCBI Official Synonym Full Names | ephrin-B1                                                                                                           |
| NCBI Official Symbol             | EFNB1                                                                                                               |
| NCBI Official Synonym Symbols    | CFND; CFNS; EFL3; EPLG2; Elk-L; LERK2                                                                               |
| NCBI Protein Information         | ephrin-B1; EFL-3; LERK-2; ELK ligand; ligand of eph-related kinase 2; eph-related receptor tyrosine kinase ligand 2 |
| UniProt Protein Name             | Ephrin-B1                                                                                                           |
| UniProt Gene Name                | EFNB1                                                                                                               |

|                            |                                   |
|----------------------------|-----------------------------------|
| UniProt Synonym Gene Names | EFL3; EPLG2; LERK2; ELK-L; LERK-2 |
| UniProt Entry Name         | EFNB1_HUMAN                       |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/hek293-cells-efnb1-active-protein/ephrin-b1/257948>