

# Human Ephrin-A4 / EFNA4 Protein (His Tag)



Sino Biological  
Biological Solution Specialist

Catalog Number: 12087-H08H

## General Information

### Gene Name Synonym:

EFL4; EPLG4; LERK4

### Protein Construction:

A DNA sequence encoding the human EFNA4 (NP\_005218.1) (Met1-Gly171) was expressed with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

## QC Testing

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

### Bio-activity:

Measured by its binding ability in a functional ELISA. Immobilized recombinant Human EFNA4h(NEW) (Cat:12087-H08H) at 10 µg/ml(100 µl/well) can bind human EPHA7-His/Biotin (Cat:11657-H08H), The EC<sub>50</sub> of human EPHA7-His/Biotin (Cat:11657-H08H) is 150-320 ng/mL.

### Endotoxin:

< 1.0 EU per µg protein as determined by the LAL method.

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Leu 26

### Molecular Mass:

The recombinant human EFNA4 consists of 157 amino acids and predicts a molecular mass of 17.8 kDa.

### Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

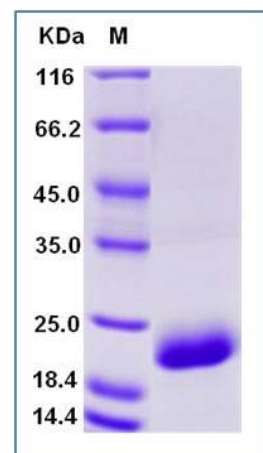
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

EPH-related receptor tyrosine kinase ligand 4 (Ephrin-A4) also known as EFNA4, is a member of the Ephrin family. The Eph family receptor interacting proteins (ephrins) are a family of proteins that serve as the ligands of the Eph receptor, which compose the largest known subfamily of receptor protein-tyrosine kinases (RTKs). Eph/ephrin interactions are implicated in axon guidance, neural crest cell migration, establishment of segmental boundaries, and formation of angiogenic capillary plexi. 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. Ephrin-A4/EFNA4 functions as a cell surface GPI-bound ligand for Eph receptor, a family of receptor tyrosine kinases which are crucial for migration, repulsion and adhesion during neuronal, vascular and epithelial development.

## References

- 1.Aasheim HC, *et al.* (2000) A splice variant of human ephrin-A4 encodes a soluble molecule that is secreted by activated human B lymphocytes. *Blood*. 95(1): 221-30.
- 2.Moss A, *et al.* (2005) Ephrin-A4 inhibits sensory neurite outgrowth and is regulated by neonatal skin wounding. *Eur J Neurosci*. 22(10): 2413-21.
- 3.Cerretti DP, *et al.* (1998) Characterization of the genes for mouse LERK-3/Ephrin-A3 (Epl3), mouse LERK-4/Ephrin-A4 (Epl4), and human LERK-6/Ephrin-A2 (EPLG6): conservation of intron/exon structure. *Genomics*. 47(1): 131-5.

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