

# Human Ephrin-A5 / EFNA5 Protein (His Tag)

Catalog Number: 10192-H08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

AF1; EFL5; EPLG7; GLC1M; LERK7; RAGS

### Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Asn 203) of human Ephrin-A5 (NP\_001953.1) precursor was expressed with a C-terminal polyhistidine tag.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 90 % as determined by SDS-PAGE

### Bio Activity:

**Measured by its binding ability in a functional ELISA . Immobilized human EPHA5 at 20 µg/ml (100 µl/well) can bind human EFNA4 with a linear ranger of 1.28-32 ng/ml.**

### Endotoxin:

< 1.0 EU per µg of the 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:** Gln 21

### Molecular Mass:

The recombinant human Ephrin-A5 consists of 194 amino acids and has a calculated molecular mass of 23 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhEphrin-A5 is approximately 27 kDa due to glycosylation.

### 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:

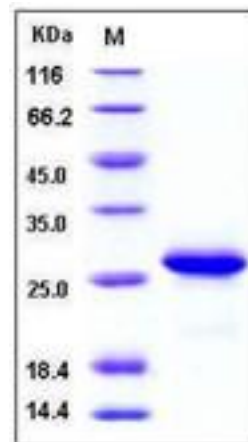
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Ephrin-A5 also known as EFNA5, 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). 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. Ephrin-A5/EFNA5 may function actively to stimulate axon fasciculation. The interaction of EFNA5 with EPHA5 also mediates communication between pancreatic islet cells to regulate glucose-stimulated insulin secretion. Ephrin-A5/EFNA5 also serves as a cognate/functional ligand for EPHA7, their interaction regulates brain development modulating cell-cell adhesion and repulsion.

## References

1.Frisén J, *et al.* (1998) Ephrin-A5 (AL-1/RAGS) is essential for proper retinal axon guidance and topographic mapping in the mammalian visual system. *Neuron*. 20(2): 235-43. 2.Feldheim DA, *et al.* (2000) Genetic analysis of ephrin-A2 and ephrin-A5 shows their requirement in multiple aspects of retinocollicular mapping. *Neuron*. 25(3): 563-74. 3.Wahl S, *et al.* (2000) Ephrin-A5 induces collapse of growth cones by activating Rho and Rho kinase. *J Cell Biol*. 149(2): 263-70.

**Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.**

**For US Customer:** Fax: 267-657-0217 • Tel: 215-583-7898

**Global Customer:** Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>