

# Mouse Ephrin-A5 / EFNA5 Protein (Fc Tag)

Catalog Number: 50597-M02H



**Sino Biological Inc.**

Biological Solution Specialist

## General Information

### Gene Name Synonym:

AL-1, AV158822, EFL-5, Ephrin-A5, Epl7, LERK-7, RAGS

### Protein Construction:

A DNA sequence encoding the mouse EFNA5 isoform long (O08543-1) without the pro peptide (Met 1-Asn 203) was as fused with the Fc region of human IgG1 at the C-terminus.

**Source:** Mouse

**Expression Host:** Human Cells

## QC Testing

**Purity:** > 85 % as determined by SDS-PAGE

### Bio-Activity

**Measured by its binding ability in a functional ELISA . Immobilized Mouse EPHA4 at 2 µg/ml (100 µl/well) can bind mouse EFNA5-Fc 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 mouse EFNA5/Fc is a disulfide-linked homodimer. The reduced monomer consists of 424 amino acids and has a predicted molecular mass of 48.2 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of mEFNA5/Fc monomer is approximately 52 kDa due to glycosylation.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

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

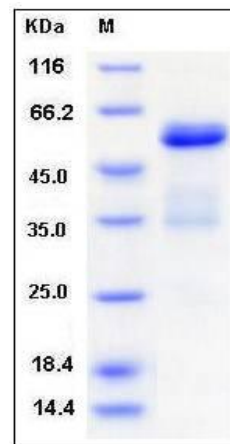
## Usage Guide

### 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.**

## SDS-PAGE:



## Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## Protein Description

Ephrin-A5, also known as AL-1, RAGS, or LERK-7 (ligand for eph-related kinases, 7), is a member of the ephrin ligand family which binds the members of Eph receptor subfamily of tyrosine kinases. Based on their structure and sequence relationships, ephrins are divided into ephrin-A and ephrin-B class, and ephrin-A members are anchored to the membrane by GPI linkage. Ephrin-A5 is expressed with the highest levels in human adult brain, heart, spleen, and ovary and human fetal brain, lung, and kidney. This ligand has been reported to bind Eph A2, Eph A3, Eph A4, Eph A5, Eph A6, Eph A7, Eph A8, and Eph B2 receptors. The interactions between Eph receptors and their ephrin ligands have been implicated in mediating developmental events, particularly in the nervous system through regulating cell migration and axon pathfinding. It has been reported that Ephrin-A5 prevents axon bundling in cocultures of cortical neurons with astrocytes, a model of late stage nervous system development and differentiation.

## References

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2. Kozlosky, C.J. et al., 1997, Cytokine. 9: 540-549.
3. Pasquale, E.B. et al., 1997, Curr. Opin. Cell Biol. 9: 608-615.
4. Himanen, J.P. et al., 2004, Nat. Neurosci. 7: 501-509.
5. Eberhart, J. et al., 2004, J. Neurosci. 24: 1070-1078.

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