

# Rat Ephrin A2/EFNA2 Protein (Fc Tag)

Catalog Number: 80110-R02H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

EFNA2

### Protein Construction:

A DNA sequence encoding the rat Efna2 (NP\_001162141.1) (Met1-Ser183) was expressed with the Fc region of human IgG1 at the C-terminus.

**Source:** Rat

**Expression Host:** HEK293 Cells

## QC Testing

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

### Bio Activity:

**Measured by its ability to bind rat EPHA4-His(Cat:80123-R08H) in functional ELISA.**

### 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:** Arg 21

### Molecular Mass:

The recombinant rat Efna2 consists of 404 amino acids and predicts a molecular mass of 45.8 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:

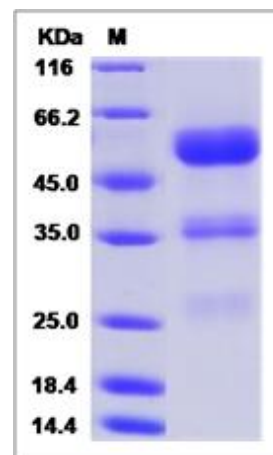
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Ephrin-A2 also known as EFNA2 or EPH-related receptor tyrosine kinase ligand 6, 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-A2 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. 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-A2 regulates the position-specific affinity of limb mesenchyme and is involved in cartilage pattern formation in the limb.

## References

1. 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.
2. Journey WM, *et al.* (2002) Rac1-mediated endocytosis during ephrin-A2- and semaphorin 3A-induced growth cone collapse. *J Neurosci*. 22(14): 6019-28.
3. Holmberg J, *et al.* (2005) Ephrin-A2 reverse signaling negatively regulates neural progenitor proliferation and neurogenesis. *Genes Dev*. 19(4): 462-71.

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