# Mouse Ephrin-A1 / EFNA1 Protein (Fc Tag)

Catalog Number: 50593-M02H



# **General Information**

# Gene Name Synonym:

Al325262; B61; Efl1; Epl1; Eplg1; Lerk1

#### **Protein Construction:**

A DNA sequence encoding the mouse EFNA1 (NP\_612182.1) without the propeptide (Met 1-Ser 182) was fused with the Fc region of human IgG1 at the C-terminus

Source: Mouse

Expression Host: HEK293 Cells

**QC** Testing

Purity: > 85 % as determined by SDS-PAGE

#### **Bio Activity:**

Measured by its binding ability in a functional ELISA. Immobilized Mouse EphA2 at 2  $\mu$ g/ml (100  $\mu$ l/well) can bind mouse EphrinA1 with a linear range of 0.16-20 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  $^{\circ}\mathrm{C}$ 

Predicted N terminal: Asp 19

#### **Molecular Mass:**

The secreted recombinant mouse EFNA1/Fc is a disulfide-linked homodimeric protein. The reduced monomer comprises 405 amino acids and has a predicted molecular mass of 46.4 kDa. As a result of glycosylation, the apparent molecular mass of rm EFNA1/Fc monomer is approximately 53 kDa in SDS-PAGE under reducing conditions.

# 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:

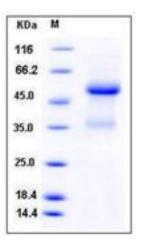
Store it under sterile conditions at  $-20\,^\circ\mathrm{C}$  to  $-80\,^\circ\mathrm{C}$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

# 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 1 (abbreviated as Ephrin-A1) also known as ligand of eph-related kinase 1 or EFNA1, is a member of the ephrin (EPH) 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-A1/EFNA1 and its Eph family of receptor tyrosine kinases are expressed by cells of the SVZ. 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-A1 and one of its receptor EphA2 were expressed in xenograft endothelial cells and also tumor cells and play a role in human cancers, at least in part by influencing tumor neovascularization.

# References

1.Deroanne C, et al. (2003) EphrinA1 inactivates integrin-mediated vascular smooth muscle cell spreading via the Rac/PAK pathway. J Cell Sci. 116(7): 1367-76. 2.Ojima T, et al. (2006) EphrinA1 inhibits vascular endothelial growth factor-induced intracellular signaling and suppresses retinal neovascularization and blood-retinal barrier breakdown. Am J Pathol. 168(1): 331-9. 3.Wu D, et al. (2004) Prognostic value of EphA2 and EphrinA-1 in squamous cell cervical carcinoma. Gynecol Oncol. 94(2): 312-9.

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