

Mouse Ephrin-A1 / EFNA1 Protein (Fc Tag)

Catalog Number: 50593-M02H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

AI325262, B61, Efl1, Epl1, Eplg1, Lerk1

Protein Construction:

A DNA sequence encoding the mouse EFNA1 (NP_612182.1) without the pro peptide (Met 1-Ser 182) was 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 EphA2 at 2 µg/ml (100 µl/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 °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 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.

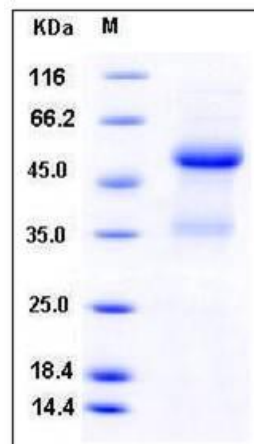
Usage Guide

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

The ephrins (Eph) and Eph receptors comprise the largest subfamily of receptor protein-tyrosine kinases and have been implicated in mediating developmental events, especially in the nervous system and in erythropoiesis. Based on their structures and sequence relationships, ephrins are divided into the ephrin-A (EFNA) class, which are anchored to the membrane by a glycosylphosphatidylinositol linkage, and the ephrin-B (EFNB) class, which are transmembrane proteins. All ephrins share a conserved extracellular sequence, which most likely corresponds to the receptor-binding domain. In molecular biology, ephrins and Eph receptors are components of cell signaling pathways involved in animal development, and implicated in some cancers. Eph receptors are classified as receptor tyrosine kinases (RTKs), and form the largest subfamily of RTKs. Almost all Eph receptors are expressed during various well defined stages of development in assorted locations and concentrations. Mouse ephrin-A1, also known as B61, LERK-1, and EFL-1, is a member of the ephrin ligand family which binds members of the Eph receptor family. Ephrin-A1 has been shown to bind EphA1, EphA2, EphA3, EphA4, EphA5, EphA6, EphA7, and EphB1. The extracellular domains of human and mouse ephrin-A1 share 85% amino acid identity.

References

1. Cerretti, DP. et al., 1995, Mol. Immunol. 32 (16): 1197-205.
2. Gale, NW. et al., 1996, Neuron. 17 (1): 9-19.
3. Pasquale, EB. et al., 1997, Curr. Opin. Cell. Biol. 9 (5): 608-15.
4. Flanagan, J. et al., 1998, Annual Review of Neuroscience. 21: 309-45.
5. Holder, N. et al., 1999, Development. 126 (10): 2033-44.
6. Wilkinson, DG. et al., 2001, Nat. Rev. Neurosci. 2 (3): 155-64.
7. Murai, KK. et al., 2003, Journal of Cell Science. 116 (Pt 14): 2823-32.

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Fax : +86-10-51029969 • Tel: +86-400-890-9989 • <http://www.sinobiological.com>