Mouse Ephrin-B2 / EFNB2 Protein (Fc Tag)

Catalog Number: **50598-M02H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

Efnb2, ELF-2, Epl5, Eplg5, Htk-L, LERK-5, Lerk5, NLERK-1

Protein Construction:

A DNA sequence encoding the mouse EFNB2 (NP_034241.2) extracellular domain (Met 1-Ala 232) was expressed with the fused Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio-Activity

Measured by its binding ability in a functional ELISA . Immobilized mouse EphB4 at 2 μg/ml (100 μl/well) can bind mouse EphrinB2 Fc with a linear range of 0.2-25 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 ℃

Predicted N terminal: Arg 29

Molecular Mass:

The recombinant mouse EFNB2/Fc is a disulfide-linked homodimer. The reduced monomer comprises 445 amino acids and has a predicted molecular mass of 49 kDa. As a result of glycosylation, the apparent molecular mass of rmEFNB2/Fc monomer is approximately 55-60 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.

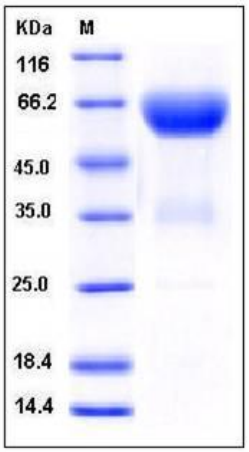
Usage Guide

Storage:

Store it under sterile conditions at -20℃ to -80℃ 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 glycosyl- phosphatidylinositol 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. This conserved sequence consists of approximately 125 amino acids and includes four invariant cysteines. The cytoplasmic domains are approximately 80 amino acids long and are highly conserved, especially the last 33 amino acids. 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 sub-family of RTKs. Almost all Eph receptors are expressed during various well defined stages of development in assorted locations and concentrations. Mouse Ephrin-B2 is a member of the ephrin ligand family, which binds members of the Eph receptor family. It has been shown to bind EphA4, EphB1, EphB2, EphB3, and EphB4. Ephrin-B2 plays a role in a variety of developmental processes, including arterial-venous differentiation, neural crest cell migration, and axon guidance.

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. Flanagan, J. et al., 1998,Annual Review of Neuroscience.21: 309-45.
4. Holder, N. et al., 1999, Development. 126 (10): 2033-44.
5. Wilkinson, DG. et al., 2001,Nat. Rev. Neurosci.2 (3): 155-64.
6. Murai, KK. et al., 2003,Journal of Cell Science.116 (Pt 14): 2823-32.