Rat Ephrin-B3 / EFNB3 Protein (Fc Tag)

Catalog Number: **80112-R02H**

General Information

Gene Name Synonym:

EFNB3

Protein Construction:

A DNA sequence encoding the rat EFNB3 (NP_001094450) (Met1-Ser224) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA.
Immobilized mouse EphB3-His (Cat:50581-M08H) at 10 μg/ml (100 μl/well) can bind rat EFNB3-Fc, The EC_{50} of rat EFNB3-Fc is 14.1-33.2 ng/ml.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Predicted N terminal: Leu 28

Molecular Mass:

The recombinant rat EFNB3/Fc is a disulfide-linked homodimer. The reduced monomer comprises 438 amino acids and has a predicted molecular mass of 48.7 kDa. The apparent molecular mass of the protein is approximately 55 and 34 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

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

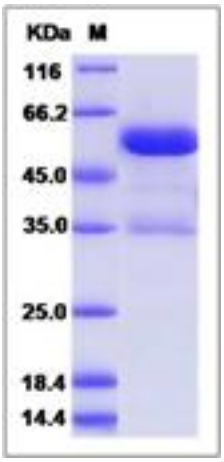
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Ephrin B3 belongs to the ephrin family. 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. Ephrin B3 is important in brain development as well as in its maintenance. It is especially important for forebrain function since its expression levels were particularly high in several forebrain subregions compared to other brain subregions. Ephrin B3 binds to, and induce the collapse of, commissural axons/growth cones in vitro. It may play a role in constraining the orientation of longitudinally projecting axons.

References

1.Takemoto M, et al. (2002) Ephrin-B3-EphA4 interactions regulate the growth of specific thalamocortical axon populations in vitro. Eur J Neurosci. 16(6):1168-72.
2.Brckner K, et al. (1999) EphrinB ligands recruit GRIP family PDZ adaptor proteins into raft membrane microdomains. Neuron. 22(3):511-24.
3.Bergemann A, et al. (1998) Ephrin-B3, a ligand for the receptor EphB3, expressed at the midline of the developing neural tube. Oncogene. 16(4):471-80.