Cynomolgus EphB6 / EphB6 Protein (Fc Tag)

Catalog Number: **90045-C02H**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

EphB6

Protein Construction:

A DNA sequence encoding the cynomolgus EPHB6 (Met1-Ser591) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Cynomolgus

Expression Host: HEK293 Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Bio Activity:

1. Measured by its ability to bind human EFNB1-His (Cat:10894-H08H) in a functional ELISA. 2. Immobilized EFNB2-His (Cat:10881-H08H) at 10 μg/ml (100 μl/well) can bind Cynomolgus EPHB6-Fc, The EC_{50} of Cynomolgus EPHB6-Fc is 20.6-48 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: Leu 32

Molecular Mass:

The recombinant cynomolgus EPHB6 is a disulfide-linked homodimer. The reduced monomer comprises 801 amino acids and has a calculated molecular mass of 86.9 KDa.The apparent molecular mass of the protein is approximately 97 KDa respectively in SDS-PAGE.

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:

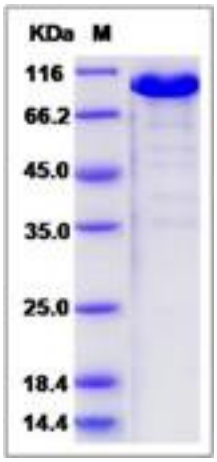
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Ephrins are divided into the ephrin-A (EFNA) class and the ephrin-B (EFNB) class based on their structures and sequence relationships. Ephrin receptors make up the largest subgroup of the receptor tyrosine kinase (RTK) family. EphB6 is an unusual Eph receptor, lacking catalytic capacity due to alterations in its kinase domain. Interestingly, increased metastatic activity is associated with reduced EphB6 receptor expression in several tumor types, including breast cancer. This emphasizes the potential of EphB6 to act as a suppressor of cancer aggressiveness. EphB6 suppress cancer invasiveness through c-Cbl-dependent signaling, morphologic changes, and cell attachment and indicate that EphB6 may represent a useful prognostic marker and a promising target for therapeutic approaches. EphB6 can both positively and negatively regulate cell adhesion and migration, and suggest that tyrosine phosphorylation of the receptor by an Src family kinase acts as the molecular switch for the functional transition. In addition, Ephrin-B2 may be a physiological ligand for the EphB6 receptor.

References

1.Munthe E, *et al.* (2000)Ephrin-B2 is a candidate ligand for the Eph receptor, EphB6. FEBS Lett. 466(1): 169-74. 2.Matsuoka H, *et al.* (2005) Biphasic functions of the kinase-defective Ephb6 receptor in cell adhesion and migration. J Biol Chem. 280(32): 29355-63. 3.Truitt L, *et al.* (2010) The EphB6 receptor cooperates with c-Cbl to regulate the behavior of breast cancer cells. Cancer Res. 70(3): 1141-53.