Mouse EphB6 Protein (His Tag)

Catalog Number: **51123-M08H**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

Cekl; Mep

Protein Construction:

A DNA sequence encoding the mouse EPHB6 (O08644-1) (Met1-Ser587) was expressed with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Bio Activity:

1. Immobilized mouse EPHB6-His at 10 μg/ml (100 μl/well) can bind mouse EFNB1-Fc (Cat:50580-M02H), The EC_{50} of mouse EFNB1-Fc (Cat:50580-M02H) is 0.12-0.28 μg/ml.
2. Immobilized mouse EPHB6-His at 10 μg/ml (100 μl/well) can bind mouse EFNB2-Fc (Cat:50598-M02H), The EC50 of mouse EFNB2-Fc (Cat:50598-M02H) is 0.04-0.08 μg/ml.

Endotoxin:

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

Predicted N terminal: Leu 33

Molecular Mass:

The recombinant mouse EPHB6 comprises 566 amino acids and has a predicted molecular mass of 61.1 kDa. The apparent molecular mass of the protein is approximately 91 and 65 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℃.

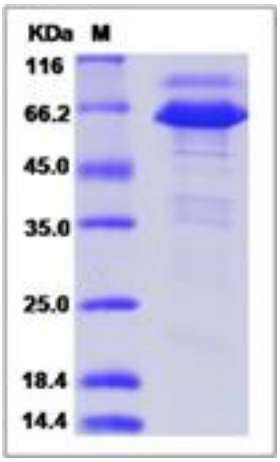
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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.