# Mouse EphB4 / HTK Protein (Fc Tag)

Catalog Number: 50582-M02H



## **General Information**

### Gene Name Synonym:

AI042935; Htk; MDK2; Myk1; Tyro11

#### **Protein Construction:**

A DNA sequence encoding the mouse EPHB4 (P54761-1) extracellular domain (Met 1-Ala 539) was fused with the Fc region of human IgG1 at the C-terminus

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

### **Bio Activity:**

Measured by its binding ability in a functional ELISA. Immobilized Mouse Ephrin B2 His (Cat:50598-M08H) at 2  $\mu$ g/ml (100  $\mu$ l/well) can bind Mouse EphB4 hFc (Cat:50582-M02H), the EC<sub>50</sub>?of Mouse EphB4 hFc is 2.0-10.0 ng/mL.

### **Endotoxin:**

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

Predicted N terminal: Leu 16

# **Molecular Mass:**

The secreted recombinant mouse EPHB4/Fc is a disulfide-linked homodimeric protein. The reduced monomer comprises 765 amino acids and has a predicted molecular mass of 84.7 kDa. As a result of glycosylation, the apparent molecular mass of rm EPHB4/Fc monomer is approximately 110 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°C to -80°C.

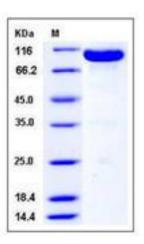
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

# Avoid repeated freeze-thaw cycles.

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **Protein Description**

Ephrin type-B receptor 4 is a protein that in humans is encoded by the EPHB4 gene. It is a single-pass type I membrane protein belonging to the ephrin receptor subfamily of protein kinase superfamily. Members of the ephrin and Eph family are local mediators of cell function through largely contact-dependent processes in development and in maturity. Furthermore, EphB4 protein and the corresponding ligand Ephrin-B2 contribute to tumor growth in various human tumors. EphB4 protein has tumor suppressor activities and that regulation of cell proliferation, extracellular matrix remodeling, and invasive potential are important mechanisms of tumor suppression. Therefore, Ephrin-B2/EphB4 may be recognized as a novel prognostic indicator for cancers.

### References

1.Davalos V, et al. (2006) EPHB4 and survival of colorectal cancer patients. Cancer Res. 66(18): 8943-8. 2.Zhao C, et al. (2006) Bidirectional ephrinB2-EphB4 signaling controls bone homeostasis. Cell Metab. 4(2): 111-21. 3.Kertesz N, et al. (2006) The soluble extracellular domain of EphB4 (sEphB4) antagonizes EphB4-EphrinB2 interaction, modulates angiogenesis, and inhibits tumor growth. Blood. 107(6): 2330-8.