# **Human EphB4 / HTK Protein**

Catalog Number: 10235-HCCH



## **General Information**

### Gene Name Synonym:

HTK: MYK1: TYRO11

#### **Protein Construction:**

The mature form of human EphB4 (NP\_004435.3) extracellular domain (Met 1-Ala 539) with quinary-aa peptide (DDDDK) at the C-terminus was expressed and purified.

Source: Human

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 human EphB4 at 2  $\mu$ g/ml (100  $\mu$ l/well) can bind human EphrinB2 with a linear range of 1-125 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  $% \left( 1\right) =100$  at -70  $^{\circ}\mathrm{C}$ 

Predicted N terminal: Leu 16

#### **Molecular Mass:**

The recombinant human EphB4 is a monomeric protein consisting of 530 amino acids and has a calculated molecular mass of 57.7 kDa. As a result of glycosylation, rhEphB4 migrates as an approximately 65-70 kDa protein in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile 100mM NaCl, 50mM Tris, pH 7.5

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:

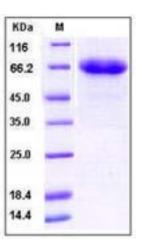
Store it under sterile conditions at  $-20\,^\circ\mathbb{C}$  to  $-80\,^\circ\mathbb{C}$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

### 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.

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