

Human EphB4 / HTK Protein (Fc Tag)

Catalog Number: 10235-H02H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

HTK; MYK1; TYRO11

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Ala 539) of human EphB4 (NP_004435.3) precursor was expressed with the fused Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA
Immobilized human EFNB2 at 2 µg/ml (100 µl/well) can bind human EphB4-Fc with a linear range of 1.56-12.5 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 recombinant human EphB4/Fc is a disulfide-linked homodimeric protein after removal of the signal peptide. The reduced monomer consists of 762 amino acids and has a calculated molecular mass of 83.8 kDa. As a result of glycosylation, the rhEphB4/Fc monomer migrates as an approximately 105-115 kDa protein 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.

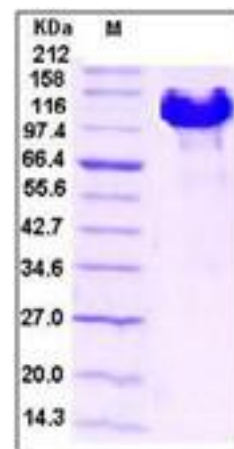
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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. Dávalos 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.