Human EphB4 Protein, His Tag

Catalog # EP4-H5229

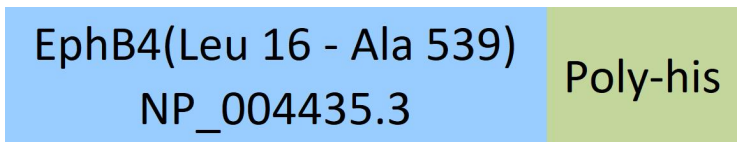
Synonym

EphB4,HTK,MYK1,TYRO11

Source

Human EphB4, His Tag(EP4-H5229) is expressed from human 293 cells (HEK293). It contains AA Leu 16 - Ala 539 (Accession # NP_004435.3). Predicted N-terminus: Leu 16

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 57.9 kDa. The protein migrates as 65-75 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>97% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

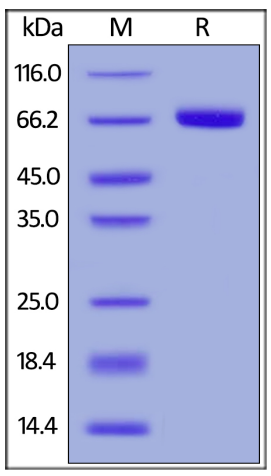
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human EphB4, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 97%.

Background

Ephrin type-B receptor 4(EPHB4) is also known as HTK, MYK1 and TYRO11,is a member of Eph family. The Eph family of receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. Ephrin receptors make up the largest subgroup of the receptor tyrosine kinase (RTK) family. The protein encoded by EPHB4 binds to Ephrin-B2 and plays an essential role in vascular development. EPHB4 and its ligand ephrin-B2 are specifically expressed on venous and arterial endothelial cells, respectively, and play an essential role in vascular development

via bidirectional signals. The forward EPHB4 signaling inhibits cell adhesion, chemotaxis, angiogenesis and tumor growth. Incontrast, the reverse Ephrin-B2 signaling exerts the opposite effect. It has been reported that aberrant expression of EPHB4 is associated with prostate cancer and highly malignant breast cancers, accordingly, EPHB4 has potential application as a therapeutic candidate.