Data Sheet (Cat.No.TMPY-04362)

TargetMol

EphB4 Protein, Human, Recombinant (aa 563-987, His & GST)

General Information

Synonyms:	HTK;EPH receptor B4;MYK1;TYRO11
Protein Construction:	A DNA sequence encoding the human EPHB4 (P54760) (Leu563-Tyr987) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	P54760
Molecular Weight:	75.2 kDa (predicted); 66 kDa (reducing conditions)

QC Testing

Biological Activity:	The specific activity was determined to be 47 nmol/min/mg using Poly(Glu:Tyr) 4:1 as substrate.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Supplied as sterile 20 mM Tris, 500 mM NaCl, pH 8.0, 3 mM DTT, 10% gly.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

Proteins are shipped with blue ice.

Protein Background

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.

Reference

Davalos V, et al. (2006) EPHB4 and survival of colorectal cancer patients. Cancer Res. 66(18): 8943-8.
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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.
Noren NK, et al. (2007) Paradoxes of the EphB4 receptor in cancer. Cancer Res. 67(9): 3994-7.
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