Recombinant EPHB4 protein (His tag)

Catalog Number	542421
Synonyms	Hepatoma transmembrane kinase; Tyrosine-protein kinase TYRO11
Species	Human
Expression System	E. coli
Accession	P54760
Molecular Weight	Predictes a molecular mass of 49.27 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 49 kDa band.

Product Information

Sequence Region	561-987
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 561-987 aa (P54760) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This recombinant protein is a fragment of human Ephrin type-B receptor 4 (EPHB4), encompassing amino acids 561-987. It includes the critical Protein kinase and SAM domains, making it an ideal tool for investigating receptor signaling mechanisms, kinase activity, and domain-specific functions in cellular communication and vascular biology. Ephrin type-B receptor 4 (EPHB4) is a receptor tyrosine kinase that binds promiscuously to transmembrane ephrin-B ligands on adjacent cells, facilitating bidirectional signaling. Forward signaling through EPHB4 regulates cellular repulsion, adhesion, and migration, and it plays a central role in heart morphogenesis, angiogenesis, and blood vessel remodeling and permeability. EPHB4 is localized to the cell membrane as a single-pass type I membrane protein, where it interacts with its ligand EFNB2 to control developmental and vascular processes. This fragment, containing the kinase and SAM domains, allows focused study of these essential functional regions without the full transmembrane context.