Recombinant EPHB3 protein (His tag)

Catalog Number	544708
Synonyms	EPH-like tyrosine kinase 2; EPH-like kinase 2; Embryonic kinase 2; EK2; hEK2; Tyrosine-protein kinase TYRO6
Species	Human
Expression System	E. coli
Accession	P54753
Molecular Weight	Predictes a molecular mass of 46.03 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

Product Information

Sequence Region	607-998
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 607-998 aa (P54753) 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	Recombinant Human Ephrin type-B receptor 3 (EPHB3) fragment (residues 607-998) is a high-purity protein encompassing the critical Protein kinase and SAM domains. This fragment serves as an essential tool for investigating kinase activity, protein-protein interactions, and downstream signaling pathways in receptor tyrosine kinase research. Ephrin type-B receptor 3 (EPHB3) is a receptor tyrosine kinase that promiscuously binds transmembrane ephrin-B ligands on adjacent cells, enabling bidirectional signaling between neighboring cells. This receptor plays crucial roles in neural development, including axon guidance for major cerebral connections like the corpus callosum and anterior commissure. EPHB3 also contributes to dendritic spine maturation, excitatory synapse formation, and cell migration processes in angiogenesis, palate development, and intestinal epithelium differentiation. The protein localizes to the cell membrane and dendritic projections as a single-pass type I membrane protein, facilitating its role in contact-dependent cellular communication and tissue patterning.