Recombinant EFNA5 protein (His tag)

Catalog Number	540044
Synonyms	AL-1; EPH-related receptor tyrosine kinase ligand 7; LERK-7
Species	Human
Expression System	E. coli
Accession	P52803
Molecular Weight	Predictes a molecular mass of 18.63 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	21-165
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 21-165 aa (P52803) 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-A5 (EFNA5) Fragment (aa 21-165) is a high-purity protein designed for studying Eph receptor interactions and bidirectional signaling. This fragment fully encompasses the Ephrin receptor-binding domain (RBD), making it an ideal tool for investigating neuronal, vascular, and epithelial development mechanisms in research applications. Ephrin-A5 is a GPI-anchored cell surface ligand that promiscuously binds Eph receptor tyrosine kinases, playing crucial roles in migration, repulsion, and adhesion during neuronal, vascular, and epithelial development. It facilitates contact-dependent bidirectional signaling, with forward signaling through Eph receptors and reverse signaling through the ephrin ligand itself. The protein localizes to caveolae-like membrane microdomains where it compartmentalizes signaling events requiring Fyn tyrosine kinase activity. Ephrin-A5 regulates diverse biological processes including cell-cell adhesion, cytoskeletal organization, lens transparency maintenance, axon fasciculation, pancreatic islet communication for insulin secretion, and brain development through interactions with multiple Eph receptors including EPHA2, EPHA3, EPHA5, and EPHA7.