Recombinant ERBB3 protein (His tag)

Catalog Number	537617
Synonyms	Proto-oncogene-like protein c-ErbB-3; Tyrosine kinase-type cell surface receptor HER3
Species	Human
Expression System	E. coli
Accession	P21860
Molecular Weight	Predictes a molecular mass of 37.51 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	665-979
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 665-979 aa (P21860) 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 ERBB3 (erbB-3) Kinase Domain (residues 665-979) is a high-purity protein fragment encompassing the complete protein kinase domain. This product is an essential tool for investigating the catalytic activity, structure, and signaling mechanisms of the HER3 receptor, supporting kinase assays, inhibitor screening, and functional studies in cancer and cell regulation research. Receptor tyrosine-protein kinase erbB-3 (HER3) is a cell surface receptor in humans that binds neuregulin-1 (NRG1) and becomes activated, leading to increased tyrosine phosphorylation and association with phosphatidylinositol 3-kinase. It may also be activated by CSPG5 and plays a critical role in regulating myeloid cell differentiation. The full-length protein is primarily localized to the cell membrane as a single-pass type I membrane protein (isoform 1), though an alternative isoform (isoform 2) is secreted. HER3's involvement in key signaling pathways underscores its significance in cellular processes and disease contexts, such as oncology and immunology.