Recombinant TVA36 protein (His tag)

Catalog Number	550271
Species	Human
Expression System	E. coli
Accession	A0A075B6V5
Molecular Weight	Predictes a molecular mass of 11.93 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	22-113
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 22-113 aa (A0A075B6V5) 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 represents a stable and soluble fragment (amino acids 22-113) of the T cell receptor alpha variable 36/delta 7 (TRAV36DV7) from Homo sapiens. It is designed for structural and biochemical studies, offering researchers a reliable tool to investigate antigen recognition mechanisms in T cell-mediated immunity. The full-length T cell receptor alpha chain, encoded by the TRAV36DV7 gene, functions as part of the alpha-beta T cell receptor (TR) complex, which is essential for adaptive immune responses. It participates in antigen recognition by binding to peptide-major histocompatibility (pMH) complexes displayed on antigen-presenting cells. This interaction initiates intracellular signaling cascades—including calcium mobilization, MAPK activation, and NF-kB pathways—that drive T cell growth, differentiation, and immune surveillance. The receptor is localized to the cell membrane, where it facilitates critical immune functions such as pathogen defense and self-tolerance. The selected fragment corresponds to the V region of the variable domain, which is directly involved in antigen binding and is structurally optimized for experimental applications.