Recombinant TVA17 protein (His tag)

Catalog Number	550291
Species	Human
Expression System	E. coli
Accession	A0A0B4J275
Molecular Weight	Predictes a molecular mass of 11.82 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	22-112
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 22-112 aa (A0A0B4J275) 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 T cell receptor alpha variable 17 (TRAV17) fragment (amino acids 22-112) - A highly stable and soluble protein fragment ideal for T cell receptor research, structural studies, and immunological applications. The T cell receptor alpha variable 17 (TRAV17) is a crucial component of the T cell receptor (TR) alpha chain that participates in antigen recognition. Alpha-beta T cell receptors are antigen-specific receptors essential for immune response, present on T lymphocyte cell surfaces. These receptors recognize peptide-major histocompatibility (pMH) complexes displayed by antigen presenting cells, which is a prerequisite for efficient T cell adaptive immunity against pathogens. Binding initiates TR-CD3 clustering and intracellular activation of signaling pathways including calcium, MAPK kinase, and NF-kB pathways, leading to gene expression critical for T cell growth and differentiation. The T cell repertoire is generated in the thymus through V-(D)-J rearrangement and shaped by intrathymic selection events. The protein is localized to the cell membrane, consistent with its role in cell surface antigen recognition.