Recombinant TVA35 protein (His tag)

Catalog Number	550071
Species	Human
Expression System	E. coli
Accession	P0DPF4
Molecular Weight	Predictes a molecular mass of 11.68 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	20-110
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 20-110 aa (P0DPF4) 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 product is a recombinant fragment of the T cell receptor alpha variable 35 (TRAV35) protein from Homo sapiens, encompassing amino acids 20-110. It represents a stable and soluble unit optimized for structural and biochemical studies, facilitating research into T cell receptor function and antigen recognition mechanisms. The full-length T cell receptor alpha variable 35 protein is a V region of the variable domain of the T cell receptor (TR) alpha chain, playing a critical role in antigen recognition. Alpha-beta T cell receptors are essential for adaptive immune responses, as they recognize peptide-major histocompatibility (pMH) complexes on antigen-presenting cells. This interaction initiates intracellular signaling through TR-CD3 clustering, leading to phosphorylation cascades involving LCK, ZAP70, and LAT, which activate calcium, MAPK, and NF-kB pathways. These pathways are vital for T cell growth, differentiation, and immune function. The T cell repertoire is shaped by V-(D)-J rearrangement in the thymus and post-thymic interactions with pMH complexes. The protein is localized to the cell membrane, as supported by experimental evidence.