Recombinant TVA83 protein (His tag)

Catalog Number	550790
Species	Human
Expression System	E. coli
Accession	A0A0A6YYJ7
Molecular Weight	Predictes a molecular mass of 12.07 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	21-113
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 21-113 aa (A0A0A6YYJ7) 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 T cell receptor alpha variable 8-3 (TRAV8-3) fragment (amino acids 21-113), a stable and soluble unit derived from the human variable domain, designed for structural and biochemical studies of T cell receptor-mediated immune recognition. The full-length T cell receptor alpha variable 8-3 protein is a V region of the variable domain of the T cell receptor alpha chain, essential for antigen recognition in adaptive immunity. It is located on the cell membrane and functions within alpha-beta T cell receptors to recognize peptide-major histocompatibility complexes displayed by antigen-presenting cells. This recognition initiates T cell receptor-CD3 clustering, intracellular signaling via LCK and ZAP70 phosphorylation, and activation of key pathways (calcium, MAPK, and NF-kB), leading to T cell growth and differentiation. The T cell repertoire is shaped by V-(D)-J rearrangement in the thymus and post-thymic interactions to ensure self-MH restriction and prevent autoaggression.