Recombinant PTCRA protein (His tag)

Catalog Number	545201
Synonyms	pT-alpha; pTa; pT-alpha-TCR
Species	Human
Expression System	E. coli
Accession	Q6ISU1
Molecular Weight	Predictes a molecular mass of 14.41 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	24-146
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 24-146 aa (Q6ISU1) 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 human Pre T-cell antigen receptor alpha (pT-alpha) protein, encompassing amino acids 24-146. It is designed for structural and biochemical studies, offering a stable and soluble unit ideal for investigating early T-cell development mechanisms. The full-length Pre T-cell antigen receptor alpha (pT-alpha) is a key component of the pre-T-cell receptor complex, which includes PTCRA, TCRB, and the CD3 complex. This complex plays a critical role in early T-cell development, particularly in the differentiation of alpha-beta T cells. pT-alpha is a single-pass type I membrane protein localized to the cell membrane, underscoring its importance in T-cell receptor signaling and immune system function.