Recombinant DOA protein (His tag)

Catalog Number	544317
Synonyms	MHC DN-alpha; MHC DZ alpha; MHC class II antigen DOA
Species	Human
Expression System	E. coli
Accession	P06340
Molecular Weight	Predictes a molecular mass of 23.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	26-217
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 26-217 aa (P06340) 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	Introducing the recombinant HLA-DOA (26-217) fragment, a high-purity protein encompassing the Ig-like C1-type domain of the HLA class II histocompatibility antigen, DO alpha chain. This fragment is engineered to facilitate studies on HLA-DM interactions and peptide exchange modulation in antigen presentation pathways. The full-length HLA class II histocompatibility antigen, DO alpha chain (HLA-DOA) is a critical modulator in the HLA class II restricted antigen presentation pathway, primarily expressed in B-cells. It functions by interacting with the HLA-DM molecule to regulate peptide exchange activity, thereby influencing immune responses. Located in endosome and lysosome membranes as a single-pass type I membrane protein, HLA-DOA forms complexes with HLA-DM during intracellular transport and in endosomal/lysosomal compartments. Heterotetramerization is essential for its exit from the endoplasmic reticulum, underscoring its role in maintaining proper MHC class II function and antigen processing.