Recombinant LV545 protein (His tag)

Catalog Number	550272
Species	Human
Expression System	E. coli
Accession	A0A087WSX0
Molecular Weight	Predictes a molecular mass of 12.74 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	20-123
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 20-123 aa (A0A087WSX0) 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 Immunoglobulin lambda variable 5-45 (IGLV5-45) fragment (residues 20-123) offers a stable and soluble unit for investigating antigen recognition mechanisms in B-cell immunity. This 104-amino acid fragment is ideal for structural studies, antibody engineering, and immunological assays. Immunoglobulin lambda variable 5-45 is a V region of the immunoglobulin light chain variable domain that contributes to antigen recognition in humoral immunity. Immunoglobulins, produced by B lymphocytes, function as membrane-bound receptors for antigen binding or as secreted antibodies that eliminate antigens. The antigen-binding site is formed by pairing the variable domain of a light chain with a heavy chain, enabling high-affinity antigen interactions through V-(D)-J rearrangement and somatic hypermutation. This protein is localized to the cell membrane and secreted, reflecting its dual roles in immune recognition and effector functions. The provided fragment corresponds to the variable domain region (residues 20-123), supporting research on antibody structure and antigen-binding specificity.