Recombinant KVD07 protein (His tag)

Catalog Number	550004
Species	Human
Expression System	E. coli
Accession	A0A0C4DH55
Molecular Weight	Predictes a molecular mass of 12.02 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	24-119
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 24-119 aa (A0A0C4DH55) 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 kappa variable 3D-7 (IGKV3D-7) fragment (residues 24-119) is a high-quality protein product derived from human sources. This fragment represents a stable and soluble variable domain unit, optimized for structural studies, antigen-binding assays, and immunological research applications. Immunoglobulin kappa variable 3D-7 (IGKV3D-7) is a component of immunoglobulin light chains that plays a critical role in antigen recognition during humoral immune responses. As part of the antibody structure, this variable domain contributes to the formation of the antigen-binding site when paired with a heavy chain variable domain. Immunoglobulins function as either membrane-bound receptors on B lymphocytes or as secreted antibodies, triggering immune activation upon antigen binding and mediating antigen elimination. The variable domains undergo V-(D)-J rearrangement and somatic hypermutation to achieve antigen specificity and affinity maturation. This protein is naturally found both secreted and membrane-bound in human cells. The provided recombinant fragment (residues 24-119) encompasses the functional variable region domain, making it ideal for studying antibody structure-function relationships and immune recognition mechanisms.