Recombinant KV320 protein (His tag)

Catalog Number	541985
Synonyms	Ig kappa chain V-III region B6; Ig kappa chain V-III region GOL; Ig kappa chain V-III region HAH; Ig kappa chain V-III region HIC; Ig kappa chain V-III region IARC/BL41; Ig kappa chain V-III region NG9; Ig kappa chain V-III region SIE; Ig kappa chain V-III region Ti; Ig kappa chain V-III region WOL
Species	Human
Expression System	E. coli
Accession	P01619
Molecular Weight	Predictes a molecular mass of 11.96 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	21-116
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 21-116 aa (P01619) 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 recombinant protein product features a stable, soluble fragment (amino acids 21-116) of the human Immunoglobulin kappa variable 3-20 (IGKV3-20), representing the V region of the immunoglobulin light chain variable domain. This carefully selected fragment is optimized for structural studies and functional analyses of antigen recognition mechanisms. Immunoglobulin kappa variable 3-20 is a crucial component of the variable domain of immunoglobulin light chains, playing an essential role in antigen recognition during humoral immune responses. As part of the antibody structure, this protein domain contributes to the formation of the antigen binding site when paired with a heavy chain variable domain. Immunoglobulins function as both membrane-bound receptors on B lymphocytes and secreted antibodies, triggering immune responses upon antigen binding. The variable domains undergo V-(D)-J rearrangement and somatic hypermutation, enabling the remarkable antigen specificity and affinity maturation characteristic of adaptive immunity. This protein is naturally expressed in both secreted and membrane-bound forms, reflecting its dual role in antigen recognition and B cell activation.