Recombinant KV315 protein (His tag)

Catalog Number	549441
Synonyms	Ig kappa chain V-III region CLL; Ig kappa chain V-III region POM
Species	Human
Expression System	E. coli
Accession	P01624
Molecular Weight	Predictes a molecular mass of 11.45 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Amino Acid Sequence	MEIVMTQSPA TLSVSPGERA TLSCRASQSV SSNLAWYQQK PGQAPRLLIY GASTRATGIP ARFSGSGSGT EFTLTISSLQ SEDFAVYYCQ QYNNWPLEHH HHHH
Form	Lyophilized powder
Formulation	Lyophilized from sterile 50 mM HEPES, 250 mM NaCl, pH 8.0
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 21-115 aa (P01624) were fused with C-terminal 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

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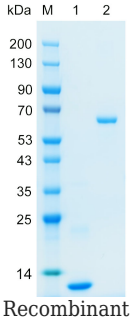
Recombinant Immunoglobulin kappa variable 3-15 (IGKV3-15) Fragment (residues 21-115) is a highly purified protein fragment derived from the human immunoglobulin light chain variable domain. This 95-amino acid fragment is engineered for stability and solubility, making it an ideal tool for structural studies, antigen-binding assays, and immunological research.
Immunoglobulin kappa variable 3-15 represents the variable region of immunoglobulin light chains, which plays a critical role in antigen recognition during humoral immune responses. As part of antibodies produced by B lymphocytes, these variable domains form the antigen-binding site through pairing with heavy chain variable regions. The full-length protein functions as either a membrane-bound receptor on B cells or as a secreted antibody, triggering immune responses upon antigen binding. Through V-(D)-J rearrangement and somatic hypermutation, these domains enable remarkable antigen specificity and affinity maturation. The protein is naturally found in both secreted form and membrane-bound form in human cells. The provided fragment (residues 21-115) encompasses a stable, soluble portion of the variable domain suitable for experimental applications.

Validation

SDS-PAGE



Recombinant KV315 protein (His tag) SDS-PAGE
M: Marker; Lane 1: KV315; Lane 2: BSA