Recombinant HV348 protein (His tag)

Catalog Number	548918
Synonyms	Ig heavy chain V-III region WEA
Species	Human
Expression System	E. coli
Accession	P01763
Molecular Weight	Predictes a molecular mass of 12.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	20-117
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 20-117 aa (P01763) 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 heavy variable 3-48 (Ig heavy chain V-III region WEA) fragment (residues 20-117) is a stable, soluble protein domain engineered for structural and functional studies. This high-purity fragment retains key antigen recognition properties, making it an essential tool for antibody research and immunology applications. Immunoglobulin heavy variable 3-48 encodes the V region of immunoglobulin heavy chains, which plays a critical role in antigen recognition during humoral immune responses. As part of the antibody structure, this variable domain combines with light chain variable regions to form the antigen-binding site. Immunoglobulins function as either membrane-bound receptors on B lymphocytes or secreted antibodies, triggering immune activation upon antigen binding and mediating antigen elimination through secreted forms. The variable domains undergo V-(D)-J rearrangement and somatic hypermutation, enabling remarkable antigen affinity and specificity. This protein is naturally found in both secreted form and membrane-bound configurations in human immune cells, highlighting its dual role in immune recognition and response initiation.