Recombinant HV366 protein (His tag)

Catalog Number	550803
Species	Human
Expression System	E. coli
Accession	A0A0C4DH42
Molecular Weight	Predictes a molecular mass of 12.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	20-116
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 20-116 aa (A0A0C4DH42) 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 3-66 (IGHV3-66) fragment (residues 20-116) is a high-purity protein designed for structural and functional studies. This fragment represents a stable, soluble variable domain region essential for antigen recognition in humoral immunity, making it ideal for antibody engineering, immunology research, and biochemical assays. Immunoglobulin heavy variable 3-66 (IGHV3-66) is a V region of the immunoglobulin heavy chain variable domain that plays a critical role in antigen recognition during humoral immune responses. Immunoglobulins, or antibodies, are glycoproteins produced by B lymphocytes and function as membrane-bound receptors or secreted effector molecules. In the recognition phase, membrane-bound immunoglobulins bind specific antigens, triggering B cell activation, clonal expansion, and differentiation into antibody-secreting plasma cells. Secreted immunoglobulins then mediate antigen elimination. The antigen-binding site is formed by the variable domain of one heavy chain paired with a light chain, allowing high-affinity antigen binding. This domain undergoes V-(D)-J rearrangement and somatic hypermutation, enabling affinity maturation for targeted immune responses. The protein is localized to the cell membrane and secreted, as supported by experimental evidence. The provided fragment (residues 20-116) encompasses the core variable domain, facilitating studies on antibody structure, antigen interaction, and immune mechanism exploration.