Recombinant IGJ protein (His tag)

Catalog Number	546645
Synonyms	Joining chain of multimeric IgA and IgM
Species	Human
Expression System	E. coli
Accession	P01591
Molecular Weight	Predictes a molecular mass of 17.25 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	23-159
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 23-159 aa (P01591) 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 Human Immunoglobulin J Chain (JCHAIN) Fragment (23-159) is a high-purity, soluble protein fragment designed for structural and biochemical studies. This 137-amino acid fragment retains key functional regions, offering a stable and reliable tool for investigating the assembly of multimeric IgA and IgM antibodies. The Immunoglobulin J chain, encoded by the JCHAIN gene in humans, serves as a critical structural component in the immune system by linking monomeric units of IgM or IgA. This linkage facilitates the formation of IgM pentamers and IgA dimers or larger polymers, enhancing antibody avidity and function. Additionally, the J chain assists in binding these immunoglobulins to the secretory component, which is essential for mucosal immunity and antibody transport. The full-length protein is naturally secreted, underscoring its role in extracellular immune responses. The provided fragment (residues 23-159) encompasses the core functional domain, enabling focused research on J chain-mediated immunoglobulin polymerization and interactions.