



Recombinant Protein Technical Manual  
Recombinant Human IGJ/Immunoglobulin J Chain  
Protein (His Tag)  
RPES1593

#### Product Data:

**Product SKU:** RPES1593

**Size:** 100µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** NP\_653247.1

#### Protein Information:

**Molecular Mass:** 17 kDa

**AP Molecular Mass:** 26 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 8.0

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** IGJ;JCH

## Immunogen Information:

**Sequence:** Gln 23-Asp 159

## Background:

Immunoglobulin J chain, also known as IGJ and IGCI, is a secreted polypeptide which is the first immunoglobulin-related polypeptide expressed during the embryogenesis and differentiation of B cells in the fetal liver. The joining Immunoglobulin J chain is a small polypeptide, expressed by mucosal and glandular plasma cells, which regulates polymer formation of immunoglobulin (Ig)A and IgM. Immunoglobulin J chain / IGJ serves to link two monomer units of either IgM or IgA. In the case of IgM, the J chain-joined dimer is a nucleating unit for the IgM pentamer, and in the case of IgA it induces larger polymers. Immunoglobulin J chain / IGJ also help to bind these immunoglobulins to secretory component. J-chain incorporation into polymeric IgA (pIgA, mainly dimers) and pentameric IgM endows these antibodies with several salient features. Immunoglobulin J chain / IGJ is involved in creating the binding site for pIgR / SC in the Ig polymers, not only by determining the polymeric quaternary structure but apparently also by interacting directly with the receptor protein. Both the immunoglobulin J chain / IGJ and the pIgR/SC are key proteins in secretory immunity.