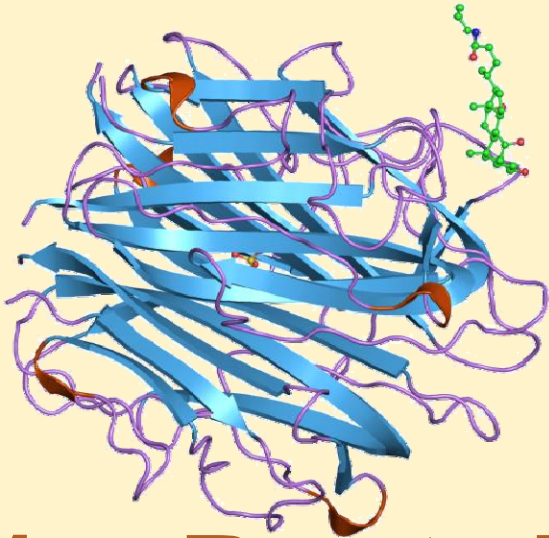


# C1q Protein for Binding Assays

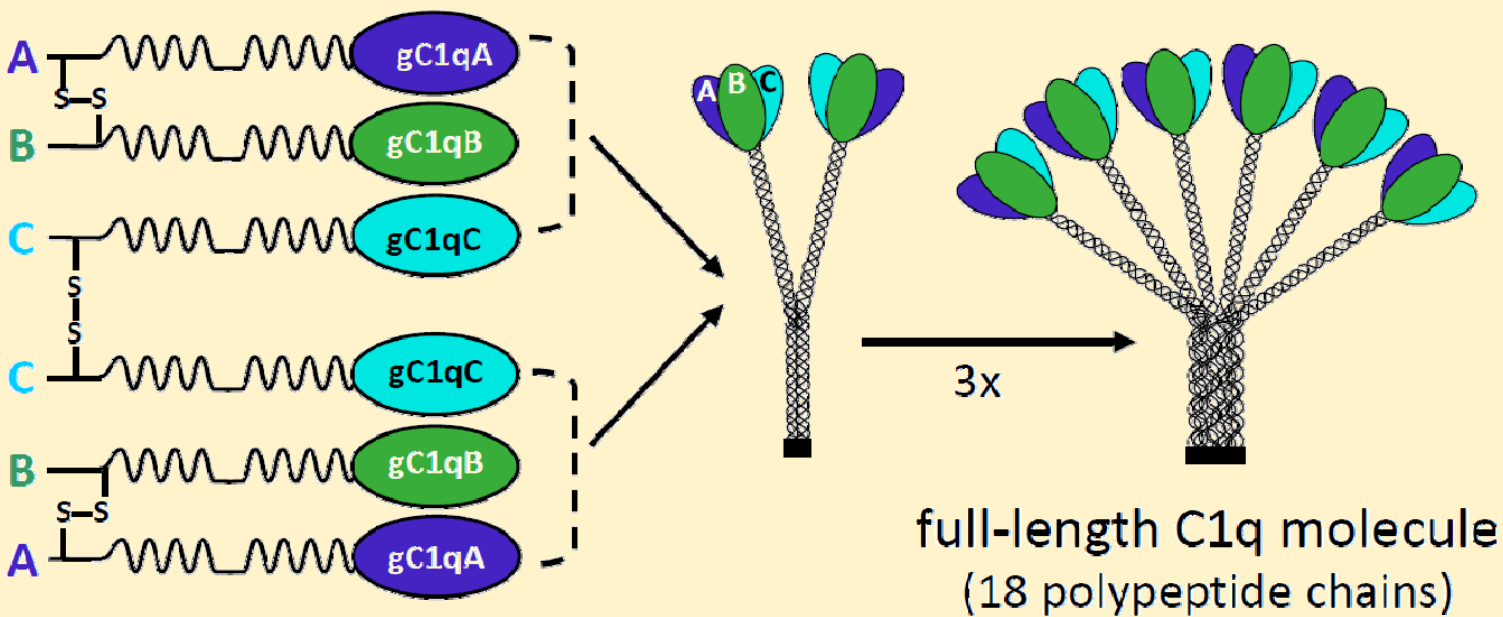
## Therapeutic Drugs



# C1q Protein

from  
Quidel / Krishgen

- ✓ Higher Protein Activity
- ✓ Higher Purity
- ✓ Better Priced



Offering INNOVATIVE SOLUTIONS for your Biosimilars

Glycosylation | downstream Contamination Assays | PK & Immunogenicity Assays | FCRN Proteins | Reagents

## For C1q Binding Assays

## for your Therapeutic Drugs Development

### KRISHGEN SPECIFICATIONS:

**Name:** C1q Protein

**Cat No:** KBI3000r

**Pack Size:** 1 mg / vial

**Concentration:** 1.0 mg/mL (see Certificate of Analysis for actual concentration)

**Form:** frozen liquid

**Activity:** > 1,000,000 C1H50 units/mg

**Purity:** > 98% by SDS PAGE

**Extinction Coeff. A280 nm** = 0.68 at 1.0 mg/ml for pure C1q

**Molecular Weight:** 410,000 Da (18 chains)

**Preservative:** None, 0.22 um sterile filtered.

**Buffer:** 10 mM HEPES, 300 mM NaCl, pH 7.2

**Storage:** -70°C or below. Avoid freeze/thaw.

Source: Normal human serum (shown by certified tests to be negative for HBsAg, HTLV-I/II, STS, and for antibodies to HCV, HIV-1 and HIV-II).

Precautions: Use normal precautions for handling human blood products.

C1q from KRISHGEN, India



### QUIDEL SPECIFICATIONS:

**Name:** C1q Protein

For Research Use Only. Not for use in diagnostic procedures.

**Cat No.:** A400

**Pack Size:** 1 mg/ml

**Concentration:** 1 mg/ml

**Form:** frozen liquid

**Purity:** > 95%

**Buffer:** HEPES, plus 40% glycerol

**Storage:** -70°C or below.

All Quidel complement components are tested for functional activity in a standard lytic or applicable functional assay and for biochemical purity by SDS-polyacrylamide gel electrophoresis. Please refer to the Certificate of Analysis for lot specific information on functional titer.

C1q from Quidel Inc., USA

### Physical Characteristics & Structure

C1q is a high molecular weight complex of 18 polypeptide chains. Each of the six arms of C1q contains three chains, an A chain (26,000 daltons), a B chain (25,000 daltons) and a C chain (24,000 daltons). The three chains are coiled into a collagen-like triple helix over approximately half their length. Half of this collagen region forms a central core where all 18 chains come together. The chains are joined in this core by disulfides in the pattern A-B and C-C. There is a bend in the centre of the collagen region allowing the arms to extend away from each other. Globular heads at the far ends of the collagen arms possess binding sites for Fc domains of immunoglobulins.

### Assays

The unit of classical pathway activity is the CH50. A similar unit, the C1qH50, is used to quantitate the activity of C1q. A C1qH50 unit is the amount of functional C1q needed to lyse 50% of  $3 \times 10^7$  EA cells (antibody-sensitized sheep erythrocytes when that amount of C1q is incubated with 5-20  $\mu$ L of C1q-Dpl in GVB++ in a total volume of 500  $\mu$ L for 30 min at 37°C. This amount of C1q indicates the sensitivity of the assay for C1q which is typically about 1 ng C1q with 10  $\mu$ L C1q-Dpl (Dodds, A.W. and Sim, R.B. (1997); Morgan, B.P. (2000)).