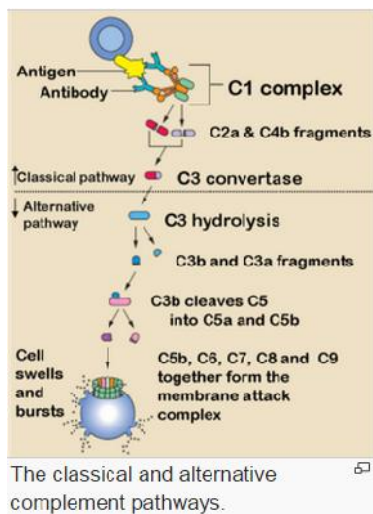


Product Specification Sheet

**Human C1q Protein**

– <b>Cat #</b> C1Q15-N	Purified Human C1q protein for ELISA or Standards	<b>SIZE:</b> 100 ug
– <b>Cat #</b> C1Q15-N-1000	Purified Human C1q protein for ELISA or Standards	<b>SIZE:</b> 1000 ug

C1q is serum glycoprotein of 18-polypeptides chains (400 Kda) consisting of three non-identical subunits, A (29 kDa), B (26 kDa), and C (246 aa, 19 kDa) in molar ratio of 1:2:2. The 80-amino acid helical component of each triple peptide contain many Gly-X-Y sequences, where X and Y are proline, isoleucine, or hydroxylysine; they, therefore, strongly resemble collagen fibrils. C1Q in the plasma is complexed with two proenzymes C1r and two C1s molecule to form the first component of complement (C1). Activation of complement via classical pathway is triggered by binding of globular head of C1q to immune complexes containing IgG (Fc-region) or IgM or to a variety of other activating substances, including C-reactive protein, retrovirus, and mitochondria. Subsequent to C1q binding, c1r and C1s are converted to proteolytic enzymes that are responsible to continuation of activation via the classical pathway.



**Sources of antigen and antibodies**

Human C1q (**cat # C1Q15-N or C1Q15-N-1000**) is purified (>95%) from human serum from human fluid that has been shown by certified tests to be negative for HbsAg and HIV and HCV. However, all precautions must be taken to avoid contamination.

**Form & Storage**

It is supplied in 10mM HEPES, 300 mM NaCl, pH 7.2, pH 7.4 in liquid or powder form. Store at –20oC. Reconstitute in water at no less than <100 ug/ml. Lot specific concentrations are provided on the vial.

**FUNCTIONAL ACTIVITY**

Titer > 15,000 C1qH50 units/mg (lot specific)

**IMMUNOCHEMISTRY**

trace amounts of IgG, IgA, IgM, albumin, C3, C4, fibrinogen, or alpha-2-macroglobulin

**Storage**

**Short-term:** unopened, undiluted vials for less than a week at 4oC.

**Long-term:** at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at –20oC or below.

**Shipping:** -20oC for solutions and room temp for lyophilized items.

**Recommended Usage**

**Western blot:** Optimal dilution must be determined by user. Native C11 ~410 kDa..

**ELISA** (1:10-50K; 10-100 ng of control peptide/well).

**General References:** (1) Loos et al (1980) J. Immunol. 124, 59; Kolb WP et al (1979) J. Immunol. 122, 2103; Petry F et al (1996) Immunogenetics 43, 370; Scherer PE et al (1995) JBC 270, 26746; Hu E et al (1996) JBC 271, 10697; Das K et al (2001) BBRC 280, 1120; Fruebis J et al (2001) PNAS 98, 2005; Maeda K et al (1996) BBRC 221, 286, Schaffler A et al (1998) BBA 1399, 187; Schaffler A et al (1999) BBRC 260, 416;

*This product is for In vitro research use only.*

**Related Items**

Catalog#	ProdDescription
2940-10	Human C1q ELISA Kit, 96 tests
2950	Human Anti-C1q IgG ELISA Kit, 96 tests
5020	Mouse Anti-C1q Ig's ELISA kit, 96 tests, Qualitative
AE-320870-1	ZMAPP-C1q activity ELISA 96 tests, Quantitative
C1Q11-C	Purified Human C1q protein Western blot +ve control
C1Q11-S	Anti-Human C1q protein antiserum
C1Q12-M	Monoclonal Anti-Human C1q protein IgG
C1Q12-MB	Monoclonal Anti-Human C1q protein IgG biotinylated
C1Q13-M	Monoclonal Anti-Mouse C1q protein IgG
C1Q13-MB	Monoclonal Anti-Mouse C1q protein IgG biotinylated
C1Q15-N	Purified Human C1q protein for ELISA or Standards
C1Q15-N-1000	Purified Human C1q protein for ELISA or Standards
C1Q16-A	Anti-Human C1q protein antiserum
C1Q15-N-Human-C1q-Protein	150716A