Native Human Complement Component 1q (C1q)

**Catalog No.**
- CRC162A
- CRC162B
- CRC162C

**Quantity:**
- 200 µg
- 1.0 mg
- 10 mg

**Alternate Names:** Complement C1q

**Description:**
Human Complement Component 1q (C1q) is a high molecular weight complex of six trimers, each consisting of an A, B, and C chain. Complement C1 is the first component in the classical complement cascade and circulates in plasma as a calcium-dependent complex of C1q, C1r, and C1s. C-terminal C1q globular domains bind to Fc regions of IgM or IgG present in immune complexes while N-terminal C1q collagen-like regions interact with the C1r2C1s2 proenzyme complex. C1q circulates in normal serum at 113 ug/ml. Patients deficient in C1q are prone to systemic lupus erythematosus (SLE) and glomerulonephritis as well as recurrent infection and skin lesions.

**UniProt ID:** P02745, P02746, P02747

**Gene ID:** 712, 713, 714

**Concentration:**
1.0 mg/ml, lot specific

**Source:** Human plasma

**Molecular Weight:** 410 kDa

**Formulation:** Sterile-filtered 0.01M HEPES, 0.3M NaCl, pH 7.2
Available containing 40% glycerol by request.

**Purity:** ≥ 95% by SDS-PAGE

**Extinction Coefficient:**
\[ E_{280nm}^{0.1\%} = 0.68 \]

**Specific Activity:**
≥ 150,000 U/mg, a unit defined as the amount of functional C1q needed to lyse 50% of 3 x 10^7 antibody-sensitized sheep erythrocytes. Lot specific, typically > 500,000 U/mg.

**Storage & Stability:**
Upon receipt store unopened at -80°C for up to 1 year. Upon initial thaw, prepare aliquots of the stock solution and store at -80°C.

**Infectious Disease Statement:**
Prepared from human serum shown by FDA approved tests to be negative for HbsAG, HTLV-I/II, STS, and negative for antibodies to HCV, HIV-I and HIV-II.

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