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ProductInformation

COMPLEMENT C1q, HUMAN

Product No. **C 0660** Store at –20 °C

Product Description

Human complement C1q is composed of six A-B dimers and three C-C dimers. C1q shows three subunits with molecular weights of 29,000, 26,000 and 22,000 after reduction with dithiothreitol.² The C1q molecule is a collagen-like protein which interacts with C1r and C1s through a calcium ion to form the complement component C1. Each component has a distinct function. The binding of C1q to the Fc portion of immunoglobulin results in activating the C1r, which in turn activates the C1s to yield the fully active C1 complement.^{34,5} Since the isolated C1q is free from contamination by IgG, IgM and IgA, a potential use of this protein is in recognizing the circulating immune complexes in various clinical conditions.

Storage

Store lyophilized solid at -20 °C. Store at -70 °C after reconstituting with distilled water. Repeated freezing and thawing is **not** recommended.

Product Profile

Approx. m	olecular weight: 410,000	
Protein:	Determined by method of Lowry	
Form:	Lyophilized from a solution containing	
	0.5 M NaCl and 0.05 M Tris, pH 7.3	
Purity:	Single band against anti-C1q serum by	
-	immunoelectrophoresis. Single or no band	
	against anti-whole serum. No visible	
	reaction against anti-IgA, anti-IgM and anti-	
	IgG serum at 20 μg of protein per gel.	

Activity: Functionally active as assayed by the modified method of Kolb, et al.¹ using C1q Deficient Serum (Product No. C8567)

References

- 1. Kolb, W.P., et al., J. Immunol., 122, 2103 (1979)
- Müller-Eberhard, H.J., Ann. Rev. Biochem., 44, 697 (1975)
- Velet, G., and Cooper N.R., J. Immunol., **112**, 339 (1974)
- 4. Yasmeen, D., J. Immunol., **116**, 518 (1976)
- 5. Sim, R. B., et al., Biochem. J., 163, 219 (1977)

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