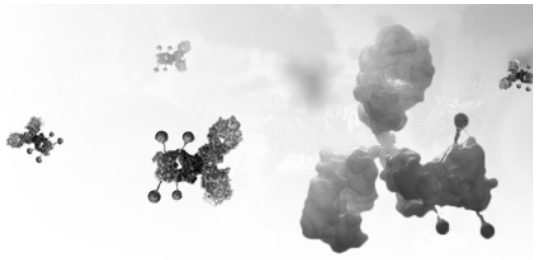

Human C1 Complex (DAG4645)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Human C1 Complex
Species	Human
Purity	Purified C1 complex is free of other complement proteins, but it is not a pure protein and it contains other high MW plasma proteins
Conjugate	Unconjugated
Applications	immunogen
Format	Frozen liquid
Concentration	>0.20 mg C1/mL based on functional activity measurement (see Certificate of Analysis for actual concentration)
Buffer	50 mM sodium acetate, 50 mM EACA, 10 mM benzamidine, 10 mM, EDTA, 300 mM NaCl, 40% glycerol, pH 5.5
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	C1 is the first complement component in the cascade referred to as the classical pathway of complement. C1 binds to and is activated by antibodies bound to antigens (immune complexes) yielding a protease that initiates the cascade. C1 is actually a non-covalent complex of three different proteins (C1q, C1r and C1s) bound together in a calcium-dependent complex. C1q binds through two or more of its six arms to the Fc domains of IgG or IgM. The binding of multiple arms to immune complexes is thought to introduce stress which causes the two C1r

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

	proteins in the complex (protease zymogens) to auto-activate themselves producing two active C1r serine proteases These activated C1r subunits cleave and activate the two C1s protease zymogens in the complex. Activated C1s cleaves complement component C4 releasing C4a and initiating covalent attachment of C4b to the activating surface. Activated C1s also cleaves C2 and the larger fragment of C2 binds to the surface-attached C4b forming C4b,C2a which is the C3/C5 convertase of the classical pathway.
Keywords	C1q A; C1q B; C1q C; C1r; C1s; C1q; C1 Complex

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