

NATURAL HUMAN C1

Catalog no HC2122 (lot number and expiry date are indicated on the label)

Description Human complement protein C1 is the first component of the classical complement pathway. Activation of the C1-complex (composed of C1q, C1r and C1s, forming C1qr2s2), occurs when C1q binds to IgM or IgG complexed with antigens, or when C1q binds directly to the surface of the pathogen. Activation of C1r and C1s occurs and so initiates the classical pathway of complement activation. The C1 activation products split C4 and then C2, producing C4b2a complex, which promotes cleavage of C3 into C3a and C3b.

Cross reactivity **Cross reactant** **Reactivity**
Trace amounts of C3, C4, or C5 < 0.1%

Formulation 1 ml of approximately 200 µg/ml purified natural human C1 isolated from healthy blood donors, in 50 mM NaAcetate, 50 mM EACA, 10 mM Benzamidine, 10 mM EDTA, 300 mM NaCl, 40% glycerol, pH 5.5. The blood donors have been tested and found negative for various viruses (see table: "Human blood test results"). **The functional activity is indicated on the label.**

Human blood test results	
HBsAg	negative
HCV	negative
Anti-HIV 1 and 2	negative

Application

	F	FC	FS	IA	IF	IP	P	W
Yes			•					
No								
N.D.								

N.D.= Not Determined; F = Frozen sections; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IF = Immuno Fluorescence; IP = Immuno Precipitation; P = Paraffin sections; W = Western blot

Application notes The biological activity of C1 is defined as the amount of C1 required to yield 50% lysis of sensitized erythrocytes (EA).

Use For functional studies, *in vitro* dilutions have to be optimized in user's experimental setting.

Storage and stability Product should be stored at -70°C. Repeated freeze and thaw cycles will cause loss of activity. The exact expiry date is indicated on the label. Use C1 protein within 24 hours after thawing and keep on ice. Remainder amounts should be aliquoted and immediately re-frozen for future use. Aliquots should never be thawed more than once. Under recommended storage conditions, product is stable for at least one year.

Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

Also available HC2123 Natural Human C1q
HC2124 Natural Human C2
HC2125 Natural Human C3
HC2128 Natural Human C4