

C3

Native Human Complement iC3b, Inactive

Catalog No.	CSI19504	Quantity:	250 µg
Alternate Names:	Complement C3b inactive, Complement component 3b inactive		
Description:	iC3b (inactivated C3b) is derived from C3b. Conversion of C3b to iC3b destroys almost all of the functional binding sites present on C3b. C3b itself is produced by all three pathways of complement when native C3 is cleaved releasing C3a. iC3b is prepared by cleavage of C3b by factor I in the presence of factor H. Cleavage by factors H and I occurs rapidly when the C3b is free in solution and is slower when it is attached to a surface. Other cofactors for factor I also permit cleavage of C3b to iC3b and these include the two membrane proteins CR1 (CD35) and MCP (CD46). Factor I can cleave C3b in two places in the alpha chain and if both sites are cleaved a small fragment (C3f, 2,000 Da) is released. If the C3b precursor was attached to a surface, the iC3b remains on that surface. This iC3b is made from fluid phase C3b and is not capable of attaching to a surface. Surface-bound iC3b and its breakdown product C3d are recognized by numerous receptors on lymphoid and phagocytic cells which use these ligands to stimulate phagocytosis and antigen presentation to cells of the adaptive immune system. Receptors for iC3b are CR2 (CD21) found on B-cells and CR3 (CD11b/CD18) found on phagocytes. One of the results of iC3b-receptor interaction is an expansion of target-specific B-cell and T-cell populations.		
UniProt ID:	P01024		
Gene ID:	718		
Source:	Human serum		
Molecular Weight:	176 kDa three chains		
Formulation:	Sterile-filtered PBS, pH 7.2		
Extinction Coefficient:	$E_{280nm}^{0.1\%} = 1.03$		
Purity:	≥ 95% by SDS-PAGE		
Volume:	lot specific		
Concentration:	1.0 mg/ml, lot specific		
Contaminants:	Trace amounts of IgG, IgA, IgM, albumin, C5, Factor B, Factor H, Factor I by immunochemistry.		
Storage & Stability:	Store unopened, as supplied at -80°C for up to 1 year. Thaw vial quickly in a 37°C water bath, mix, and immediately place on ice. Prepare aliquots, store at -80°C. >10% activity loss per thaw. Avoid freeze/thaw.		
Infectious Disease Statement:	Prepared from serum shown by FDA-certified tests to be negative for HBsAg, negative by anti-Hbc, HCV, HIV-1/2, Syphilis and negative by NAT for RNA from HIV-1, HCV, HBV, Zika, HTLV-1/2, WNV.		
Country of Origin:	USA		

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