

C3

Native Human Complement C3d

Catalog No.	CSI19506	Quantity:	100 µg
Alternate Names:	Complement C3d, Complement component 3d		
Description:	<p>C3d is derived from human C3 after a series of proteolytic cleavages. Trypsin-like enzymes (such as plasmin, thrombin, elastase, etc.) cleave iC3b separating C3c from C3dg (38,900 Da) and C3dg is further digested releasing C3g (5,100 Da) to leave C3d. iC3b (inactivated C3b) is derived from C3b. C3b itself is produced by all three pathways of complement when native C3 is cleaved releasing C3a.</p> <p>This C3d is prepared from purified human C3. The C3 is converted to C3b by treatment with the natural human C3 convertase and this C3b is converted to iC3b by treatment with complement factors H and I. Finally, this iC3b is cleaved with trypsin to yield C3d. This C3d is made from soluble C3b. If the C3b precursor was attached to a surface, such as occurs during complement activation, the iC3b, C3dg and C3d fragments would remain covalently attached to that surface. C3c is released into the fluid phase. This C3d is not capable of attaching to a surface. This can only occur during complement activation on a surface. Surface-bound C3d is linked to the target through an ester or an amide covalent bond. Ester bonds are unstable resulting in the gradual release of C3d from the particle.</p>		
UniProt ID:	P01024		
Gene ID:	718		
Source:	Human serum		
Molecular Weight:	33.8 kDa monomer		
Formulation:	Sterile-filtered PBS, pH 7.2		
Extinction Coefficient:	$E_{280\text{nm}}^{0.1\%} = 1.10$		
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		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



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