



Human C3d (DAGF-017)

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

PRODUCT INFORMATION

Antigen Description

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 (Law, S.K.A. and Reid, K.B.M. (1995)) when native C3 is cleaved releasing C3a. C3d is prepared at CompTech 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. The C3d made by CompTech 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. The C3d sold by CompTech 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.

Nature	Native
Expression System	Normal human serum
Purity	>90% by SDS-PAGE
Conjugate	Unconjugated
Molecular Weight	33.8 kDa
Procedure	None
Format	Liquid
Concentration	Batch dependent - please inquire should you have specific requirements.
Size	100 µg

Buffer	10 mM Sodium phosphate, 145 mM NaCl, pH 7.3
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Preservative	None
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Storage	Store at -70°C or below. Avoid freeze/thaw.
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BACKGROUND

Keywords	C3d
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