

C3

Native Human Complement C3a

Catalog No.	CSI19501	Quantity:	50 µg
Alternate Names:	Complement C3a, Complement component 3a,		
Description:	Native human C3a is prepared by cleavage of human C3 protein by a human C3 convertase. C3a is a member of the anaphylatoxin family of three proteins (C3a, C4a and C5a) produced by the activation of complement. Many of the biological functions of C3a are similar to those of C5a, but C3a is approximately 10- to 20-fold less active per microgram than C5a. C3a mediates many inflammatory responses including smooth muscle contraction, vasodilation, increased vascular permeability, and release of histamine from mast cells and basophils. In contrast to C5a, C3a does not exhibit significant neutrophil stimulating activities and does not induce chemotaxis, granule release or superoxide production. C3a acts through the C3a Receptor (C3aR) which is a G-protein coupled receptor found widely distributed on peripheral tissues, lymphoid cells (neutrophils, monocytes, and eosinophils) and in the central nervous system (astrocytes, neurons and glial cells). These activities of C3a are inactivated by removal of the C-terminal arginine and this occurs rapidly in plasma due to the action of carboxypeptidase N.		
UniProt ID:	P01024		
Gene ID:	718		
Source:	Human serum		
Molecular Weight:	9089 Da (77 aa) monomer		
Formulation:	Sterile-filtered PBS, pH 7.2		
Extinction Coefficient:	$E_{276nm}^{0.1\%} = 0.41$		
Purity:	≥ 98% by SDS-PAGE		
Volume:	lot specific		
Concentration:	0.5 mg/ml, lot specific		
Endotoxin:	< 0.01 EU/µg by LAL		
Contaminants:	< 2% desArg by HPLC		
Amino Acid Sequence:	SVQLTEKRM D KVGKYPKELR KCCEDGMREN PMRFSCQRRRT RFISLGEACK KVFLDCCNYI TELRRQHARA SHLGLAR		
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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