

Native Human C3a desArg

Cat. No. C3a desArg-04H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Native Human C3a desArg was purified from normal human serum (shown by certified tests to be negative for HBsAg, HTLV-I/II, STS and for antibodies to HCV, HIV-1 and HIV-II).
Species	Human
Source	Normal human serum
Description	Human C3a desArg is prepared from normal human serum after activation of C3 by human C3 convertase, followed by the removal of the C-terminal arginine by the natural carboxypeptidase N. C3a is a member of the anaphylatoxin family of three proteins (C3a, C4a and C5a) produced by the activation of complement. The desArg form of C3a is an unglycosylated polypeptide containing 76 amino acids with a molecular mass of 8,933 daltons. C3a mediates many inflammatory responses including smooth muscle contraction, vasodilation, increased vascular permeability, and release of histamine from mast cells and basophils. These activities of C3a are inactivated by removal of the C-terminal arginine and this is complete within minutes after formation in plasma. However, new activities have been identified for C3a desArg acting through the C5L2 receptor. These activities were first assigned to ASP (acylation-stimulating protein), but this was later shown to be identical to C3a desArg. C3a desArg binds to C5L2 with a K_d of approximately 70 nM. In adipocytes, macrophages, fibroblasts and many other cells triglyceride synthesis, glucose transport, and fatty acid uptake are stimulated upon C3a desArg binding in both humans and mice. C3 knockout mice lack ASP function and recombinant C3a desArg

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

is fully functional while C5L2 knockout mice are unresponsive. Many of the biological functions of insulin are expressed by C3a desArg and it also expresses endocrine effects on insulin secretion by pancreatic cells.

Form	Frozen liquid
AASequence	SVQLTEKRMDKVGKYPKELRKCCEDGMRENPMRFSCQRRTRFISLGEACKKVFLD CCNYITELRRQHARASHLGLA
Molecular Mass	8933 Da (single chain)
Extinction Coeff.	A276 nm = 0.41 at 1.0 mg/mL
Purity	>97% by SDS-PAGE
Storage	At -70 centigrade or below. Avoid freeze/thaw.
Storage Buffer	Phosphate buffered saline, pH 7.3 (No carrier proteins added)
Concentration	0.5 mg/mL
GENE INFORMATION	
Official Symbol	C3a desArg

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA