

# CERTIFICATE OF ANALYSIS - TECHNICAL DATA SHEET

Product name C3a desArg, Human, Natural

Catalog number HC2127

Lot number - Expiry date

Volume 0.1 ml Activity N.A.

**Formulation** PBS, pH 7.2 **Amount** ~50 μg

Host Species Human, isolated from healthy blood donors Concentration ~0.5 mg/ml

Endotoxin N.A. Purification N.A.

Storage -70°C Purity >90%

## Application notes

Human blood test results	
HBsAg	negative
Anti-HCV	negative
STS	negative
Anti-HIV 1 and II	negative
HTLV-I/II	negative

The blood donors have been tested and found negative for various viruses.

### **General Information**

#### Description

C3 is the third component of the complement system and plays a central role in the complement cascade. The three pathways of compliment activation come together at this key molecule. Cleavage of the pivotal complement component C3 results in the generation of a set of effector molecules which have diverse biological functions. The cleavage product C3b promotes complement activation and the subsequent formation of the membrane attack complex. C3a, the small (ca. 10 kDa) cleavage product possesses anaphylatoxic as well as immunoregulatory properties. It exerts its function through a specific receptor (C3aR), which belongs to the G-protein coupled receptor family. Expression of C3aR has been reported in many cell types including myeloid and non-myeloid cells. C3a is a protein of 74 amino acids. C3a itself is very short-lived and in serum is cleaved rapidly into the more stable C3a-desArg (also called acylation stimulating protein, ASP). Expression of C3aR on haematopoietic stern/progenitor cells has been shown to promote the trafficking/homing of these cells to the BM. Engagement of C3aR on DCs and T cells has been shown to up-regulate these cell functions. The presence of C3a is <1%.

### Storage&stability

Product should be stored at -70°C. Repeated freeze and thaw cycles will cause loss of activity. Use C3a des Arg protein within 24 hours after thawing and keep on ice. Remainder amounts should be aliquoted and immediately refreezed for future use. Aliquots should never be thawed more than once. Under recommended storage conditions, product is stable for at least one year.

#### **Precautions**

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC Robbert Zwinkels

Date 27/03/2018

Version: 02-2018

Do you have any questions or comments regarding this product? Please contact us via <a href="mailto:support@hycultbiotech.com">support@hycultbiotech.com</a>.