

## **CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

| Product name   | C9, Human, Natural                        |               |          |
|----------------|---|---------------|----------|
| Catalog number | HC2142                                    |               |          |
| Lot number     | -   | Expiry date   | -        |
| Volume         | 0.25 ml                                   | Activity      | N.A.     |
| Formulation    | PBS, pH 7.2                               | Amount        | 250 µg   |
| Host Species   | Human, isolated from healthy blood donors | Concentration | ~1 mg/ml |
| Endotoxin      | N.A.                                      | Purification  | N.A.     |
| Storage        | -70°C                                     | Purity        | >85%     |
|                |   |               |          |

## Application notes

|             | IHC-F | IHC-P | IF | FC | FS | IA | IP | W |
|-------------|-------|-------|----|----|----|----|----|---|
| Reference # |       |       |    |    |    |    |    |   |
| Yes         |       |       |    |    | •  |    |    |   |
| No          |       |       |    |    |    |    |    |   |
| N.D.        | •     | •     | •  | •  |    | •  | •  | ٠ |

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

| Human blood test results |          |  |
|--------------------------|----------|--|
| HBsAg                    | negative |  |
| HIV-1 p24 Ag             | negative |  |
| Anti-HCV                 | negative |  |
| Anti-HIV 1 and II        | negative |  |

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

• The functional activity is >70% in NHS on a mg/mg basis.

## **General Information**

| Description | Glycoprotein complement factor C9 is synthesized as a single chain protein of 558AA and is present in human serum at ca 60ug/ml. C9 is predominantly formed in the liver, but is also synthesized by monocytes, macrophages, fibroblasts and glial cells. Pore forming proteins with a membrane-attack complex perforin domain (MACPF) are most effective to kill bacteria or virus infected cells. The MACPF domain polymerizes, refolds and inserts itself into the bilayer membrane. C5b binds to the membrane and binds C6&7. The addition of C8 to the complex triggers and accelerates C9 polymerization in order to form the asymmetric pore on the target surface. A complete pore can exist out of 12-18 C9 monomers. Together with CD59, MAC formation is regulated by eg DAF, MCP and CR1. C9 deficiency is quite common, especially in the Japanese population. These patients are more susceptible for bacterial infection. |
|-------------|--|
| Aliases     | Complement Component 9   |

Cross reactivity ≤ Trace amounts of IgG, IgA, IgM, Factor I, Factor B, Factor H, C3, C4 or albumin

Storage&stability Product should be stored at -70°C. Repeated freeze and thaw cycles will cause loss of activity. Use C9 protein within 24 hours after thawing and keep on ice. Remainder amounts should be aliquoted and immediately re-freezed 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 18/12/2018

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.