

Product Information

Complement C9 from human serum

Catalog Number **C3660**
Storage Temperature $-70\text{ }^{\circ}\text{C}$

CAS RN 80295-59-6

Product Description

Human Complement C9 is a glycoprotein with a single polypeptide chain. It is present in normal plasma at a concentration of $58\pm 8\text{ }\mu\text{g/ml}$.¹ C9 is the terminal component bound during the formation of the membrane attack complex.² C9 also enhances the hemolytic function of C5b-8.³ Highly purified human C9 can be added together with C5b, C6, C7, and C8 complexes on biological membranes to mediate complement dependent lytic reactions. C9 can be radioiodinated and utilized in the study of C5b-9 complex assembly on membranes or in free solution.^{2,4-6}

Molecular mass:¹ 71 kDa

This product is supplied as a solution in phosphate buffered saline (PBS), pH 7.2.

Purity: $\geq 85\%$ (SDS-PAGE)

Protein concentration based on $E_{280}^{1\%} = 9.88$

The product is functionally pure by a sensitive hemolytic assay using deficient sera. No complement C3, C4, C5, C6, C7, or C8 is detected.

Specific Activity: $\geq 150,000\text{ C9H50 units/mg}$
(using C9 deficient serum)

Unit definition: One C9H50 unit is defined as the amount of complement C9 required to yield 50% lysis of 3×10^7 antibody-sensitized sheep erythrocytes using C9 deficient serum. For a procedure to prepare antibody-sensitized sheep erythrocytes, please visit the following link at our Enzyme Explorer:

<https://www.sigmaaldrich.com/life-science/metabolomics/enzyme-explorer/cell-signaling-enzymes/complement-proteins/preparation-of-antibody.html>

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at $-70\text{ }^{\circ}\text{C}$ is recommended. Repeated freezing and thawing is **not** recommended.

References

1. Biesecker, G., and Müller-Eberhard, H.J., *J. Immunol.*, **124(3)**, 1291-1296 (1980).
2. Kolb, W.P. *et al.*, *J. Exp. Med.*, **135(3)**, 549-566 (1972).
3. Hadding, U., and Müller-Eberhard, H.J., *Immunology*, **16(6)**, 719-735 (1969).
4. Kolb, W.P., and Müller-Eberhard, H.J., *Immunology*, **113(2)**, 479-488 (1974).
5. Podack, E.R. *et al.*, *J. Exp. Med.*, **151(2)**, 301-313 (1980).
6. Sims, P.J., *Biochim. Biophys. Acta*, **732(3)**, 541-552 (1983).

RBG,BK,GCY,MAM 09/18-1