

Product Information

Complement C8 from human serum

Catalog Number **C3535**
Storage Temperature $-70\text{ }^{\circ}\text{C}$

Product Description

Human Complement C8 is a glycoprotein with an approximate molecular mass of 150 kDa. It has three nonidentical polypeptide chains:¹⁻³

- α -chain (64 kDa)
- β -chain (64 kDa)
- γ -chain (22 kDa)

Complement C8 is present in normal plasma at a concentration of $\sim 50\text{ }\mu\text{g/ml}$.⁴ C8 plays a key role in membrane damage in complement systems. At the last stage of the complement reaction, a C5b,6,7 complex is formed and becomes partially inserted into the cell membrane. The cell will not undergo lysis until it reacts with complement C8 and C9.

Purified C8 can be radioiodinated and utilized in studies of C5b-9 complex assembly on membranes or in free solution.⁵⁻⁸ Purified C8 can also be employed as a standard for identification of C8 in a variety of biological fluids by RID, RIA, EIA, or quantitative rocket immunoelectrophoresis.

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

Hemolytic titer: $\geq 125,000$ C8H50 units/mg protein

Unit definition: One C8H50 unit is the amount of complement C8 required to yield 50% lysis of 3×10^7 antibody-sensitized sheep erythrocytes using C8 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>

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

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

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RBG,GCY,MAM 09/18-1