



Product Data Sheet

Baby Rabbit Complement serum, Cell culture grade

Cat # COMPBR-1	Baby Rabbit Complement serum, (Lyophilized), tested for complement activity	Size: 1 ml
Cat # COMPBR-C-10	Baby Rabbit Complement serum, (Lyophilized), tested for complement activity	Size: 10 ml

The complement system helps or "complements" the ability of antibodies and phagocytic cells to clear pathogens from an organism. It is part of the immune system called the innate immune system that is not adaptable and does not change over the course of an individual's lifetime. However, it can be recruited and brought into action by the adaptive immune system. The complement system consists of several small proteins found in the blood, generally synthesized by the liver, and normally circulating as inactive precursors (pro-proteins). When stimulated by one of several triggers, proteases in the system cleave specific proteins to release cytokines and initiate an amplifying cascade of further cleavages. The end-result of this activation cascade is massive amplification of the response and activation of the cell-killing membrane attack complex. Over 25 proteins and protein fragments make up the complement system, including serum proteins, serosal proteins, and cell membrane receptors. They account for about 5% of the globulin fraction of blood serum.

Intended Use

It is intended for use as a source of 3-4-week-old rabbit complement that has low heterophile activity which results in low background cytotoxicity, making products Cat # COMPBR-1 and Cat # COMPBR-C-10 ideal for use in cytotoxicity, depletion and opsonization assays.

Formulation

Baby Rabbit Complement is derived from a pool of normal rabbit serum from 3-4-week-old rabbits. It contains no other additives or preservatives.

Storage

LYOPHILIZED: Store at -20°C before reconstitution. Stable for approx. 12 months. After reconstitution, store at 4°C for a maximum of one hour.

Use Of Lyophilized Complement

Reconstitute with 1-2 ml of ice-cold distilled water (depending on size). Gently agitate to ensure that all lyophilized material is dissolved. Use within one hour of reconstitution. Keep reconstituted material on ice at all times. Storage of the reconstituted serum for longer periods at 4°C or freezing and thawing of the reconstituted material will result in reduced potency.

NOTE: This material will appear cloudy after reconstitution. The cloudy appearance is a result of the lyophilization process and does not affect potency.

Sterility

This product is not sold as sterile but can be sterilized by filtration if necessary. It is preferable to dilute the complement to a final working concentration before filtration to minimize loss of volume.

Application

Baby Rabbit Complement has been tested in a lymphocytotoxicity assay utilizing monoclonal antibodies and human lymphocytes. It was found to be a potent source of complement and to possess minimal non-specific lymphocytotoxins.

It is recommended that each investigator determine appropriate dilutions for individual use.

Performance

Cytotoxic Titer: 1:8 dilution of baby rabbit complement, lyophilized*

Toxicity: <10% at 1/2 dilution of baby Rabbit Complement

* Tested in a microlymphocytotoxicity assay, using an anti-HLA-A2 antibody at a dilution of 1/1000 on human PBLs purified using Lympholyte®-H cell separation media. Titer is defined as the last dilution to produce greater than 50% cellular cytotoxicity.

Reference: NIAID Manual of Tissue Typing Techniques 1979-1980, Edited by J.G. Ray, NIH Publication No. NIH-83-545.

*This product is for In vitro research use only

COMPBR-1

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