

Datasheet for C200-0005**Guinea Pig Complement (lyophilized) with DILUENT****Overview**

Description:	Guinea Pig Complement (Lyophilized) with DILUENT - C200-0005
Item No.:	C200-0005
Size:	5 mL
Applications:	ELISA, Other, Purification
Origin:	Guinea Pig

Product Details

Background:	Guinea Pig Complement (Lyophilized) with Diluent from Rockland Immunochemicals is optimized for high complement activity, making it an essential component for immunological applications such as immunogenicity assays and vaccine studies. It is derived from guinea pig serum, offering a robust solution for various immunological applications. This product includes a diluent for reconstitution, ensuring ease of use and consistency across applications.
Synonyms:	Complement system, tissue macrophages, blood monocytes, protease C3-convertase, mannose-binding lectin pathway, C3, C3a, C3b, C5a, C5b, C6, C7, C8, and polymeric C9, cascade cleavage and activation events, recruit inflammatory cells, anaphylatoxin
Species of Origin:	Guinea Pig

Target Details

Relevant Links:	C200 SDS
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Application Details

Suggested Applications:	ELISA, Other, Purification (Based on references)
Application Note:	Guinea Pig Complement (Lyophilized) with Diluent is designed for use in a range of immunological applications, including complement fixation tests (CFT) and serum radial hemolysis (SRH). It exhibits standard physiological properties such as normal pH, immunoelectrophoresis, hemoglobin, and IgG concentration, ensuring reliability across experiments. Ideal for ELISA, neutralization, and other applications, the complement shows robust activity with low cytotoxic background.

Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
Neutralization:	User Optimization

Tissue Data

Tissue Type:	Complement
Sex:	Mixed
Strain:	Guinea Pig - Mixed

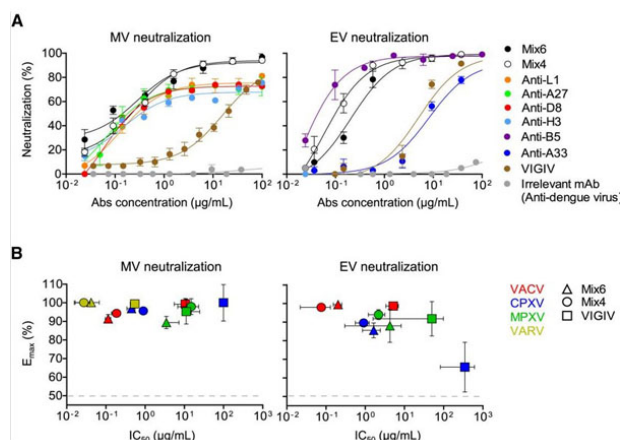
Formulation

Physical State:	Lyophilized
Concentration:	68 mg/mL by Refractometry
Buffer:	None
Sterility:	Non-sterile
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	5.0 mL
Reconstitution Buffer:	Restore with Diluent

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store Guinea Pig Complement at 4° C prior to restoration. Aliquot contents and freeze at -70° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. COMPLEMENT IS A TEMPERATURE SENSITIVE PRODUCT. IMPROPER STORAGE WILL INACTIVATE COMPLEMENT ACTIVITY.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Neutralization

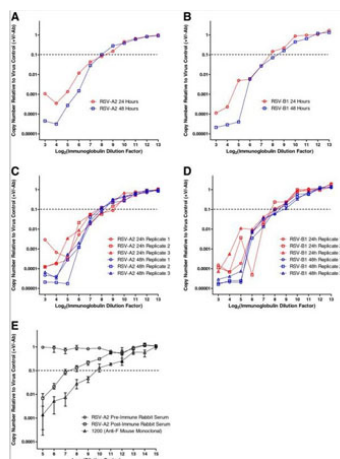
Mixtures of Four or Six mAbs Possess High Cross-Neutralizing Activity for VACV, CPXV, MPXV, and VARV.

Neutralizing activity of mAbs or VIGIV was assessed using MV- and EV-neutralization assays. mix6 included anti-L1, anti-H3, anti-A27, anti-D8, anti-B5, and anti-A33 mAbs. mix4 included anti-L1, anti-A27, anti-B5, and anti-A33 mAbs.

(A) VACV neutralization by individual mAbs or their mixtures, compared with VIGIV.

(B) Cross-neutralizing activity of mix4, mix6 and VIGIV for VACV, CPXV, MPXV, or VARV (only the MV form was tested for VARV). Data represent one of two independent experiments, shown as mean $\pm$ SD of assay triplicates.

Neutralization of VACV, CPXV, and MPXV MV particles, and MPXV EV particles was performed using 10% guinea pig complement (p/n C200-0005). Neutralization of VACV EV was performed using 10% baby rabbit complement, and neutralization of VARV MV was performed without complement. Figure 3. PMID: 27768891.



Neutralization

qRT-PCR-based microneutralization of RSV (qPCR-MN). Vero cells were seeded in 96-well culture plates (15,000 cells per well). On the following day, a two-fold dilution series was prepared from a pooled human immunoglobulin reference standard (designated as RSV-Lot 1) starting from an initial concentration of 1%. The virus inoculum (500 TCID₅₀ per well of RSV-A2 or RSV-B1) was mixed with an equal volume of RSV-Lot 1 dilution and incubated for 1 hour at 37°C. After incubation, the mixture was transferred to the plate of seeded Vero cells. At 24 or 48 hours post-infection, cell lysates were prepared using Bio-Rad SPR and subjected to qRT-PCR analysis. RNA copy numbers were normalized to the mean value obtained from virus-infected control wells in the absence of neutralizing immunoglobulin. The neutralization titer was defined as the reciprocal of the highest dilution factor of RSV-Lot 1 necessary to inhibit the PCR signal by 90% (or below the threshold of 10% of the virus control wells indicated by the dotted line). (A) RSV-A2 neutralization assessed at 24 or 48 hours post-infection (each point represents the mean; n = 3). (B) RSV-B1 neutralization assessed at 24 or 48 hours post-infection (each point represents the mean; n = 3). The individual experimental replicates assessed independently (n = 3) are shown for neutralization experiments with (C) RSV-A2 and (D) RSV-B1. Additional neutralization experiments (E) with RSV-A2 assessed at 24 hours post-infection were also performed with a monoclonal antibody with known specificity to the RSV F protein (1200) as well as rabbit sera generated pre- and post-immunization with RSV-A2 (each point represents the mean with corresponding range; n = 3). Figure 4. PMID: 23767960.

References

- Yefet R et al. Potent neutralization by antibodies targeting the MPXV A28 protein. *Nat Commun.* (2025)
- Albert JR et al. Maternal DNMT3A-dependent de novo methylation of the paternal genome inhibits gene expression in the early embryo. *Nat Commun.* (2020)
- Timiryasova TM, Luo P, Zheng L, et al. Rapid fluorescent focus inhibition test optimization and validation: Improved detection of neutralizing antibodies to rabies virus. *J Immunol Methods.* (2019)
- Gilchuk I, Gilchuk P, Sapparapu G, et al. Cross-Neutralizing and Protective Human Antibody Specificities to Poxvirus Infections. *Cell.* (2016)
- Varada JC, Teferedegne B, Crim RL, et al. A neutralization assay for respiratory syncytial virus using a quantitative PCR-based endpoint assessment. *Virology.* (2013)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.