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Datasheet for C300-0010

Guinea Pig Complement (Fresh Frozen)

Overview

Description:	Guinea Pig Complement (Fresh Frozen) - C300-0010
Item No.:	C300-0010
Size:	10 mL
Applications:	Cellular Assay, ELISA, FC, Purification
Origin:	Guinea Pig

Product Details

Background:	Guinea Pig Complement (Fresh Frozen) from Rockland Immunochemicals is optimized for high complement activity. Extracted and preserved in a fresh frozen state, this guinea pig serum-derived complement maximizes activity and stability, making it ideal for use in immunogenicity assays and other immunology-based 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:

- C300 SDS

Application Details

Suggested Applications:	Cellular Assay, ELISA, FC, Purification (Based on references)
Application Note:	Guinea Pig Complement (Fresh Frozen) is designed for use in a range of immunological applications, including complement fixation tests (CFT), serum radial hemolysis (SRH), and B-cell purification. It exhibits standard physiological properties such as normal pH, immunoelectrophoresis, hemoglobin, and IgG concentration, ensuring reliability across experiments. In cellular assays, 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.

Tissue Data

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

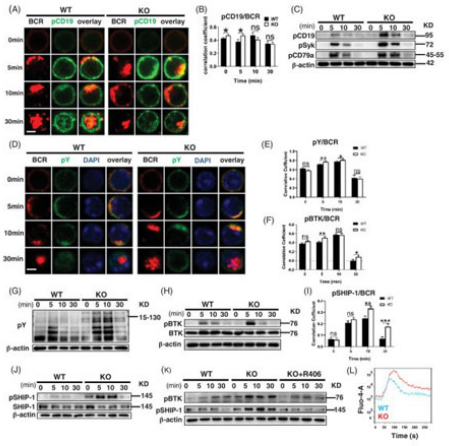
Formulation

Physical State:	Fresh Frozen
Concentration:	72mg/ml by Refractometry
Buffer:	None
Sterility:	Non-sterile
Preservative:	None
Stabilizer:	None

Shipping & Handling

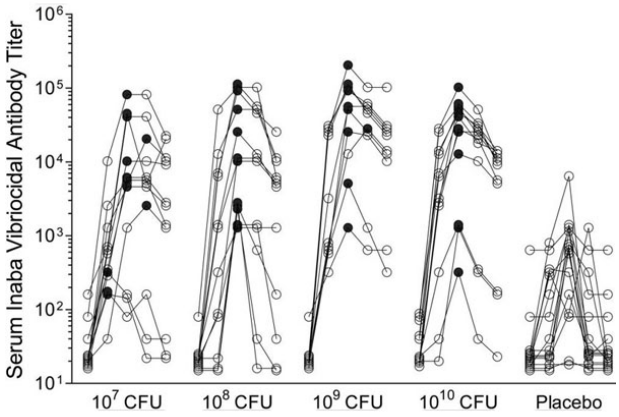
Shipping Condition:	Dry Ice
Storage Condition:	Store Guinea Pig Complement at -70° C prior to opening. Aliquot contents and freeze at -70° C or below. Use aseptic technique to maintain sterility when opening product. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after 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



Immunofluorescence Microscopy

Ccr2-KO mice exhibit enhanced BCR proximal signalling. B cells were purified from splenic mononuclear cells by incubation of anti-Thy-1 and guinea pig complement (p/n C300-0500) for 30 min. Purified splenic B cells were incubated with AF546-F(ab')2-anti-mouse-Ig (M + G) at 4°C for 30 min and activated at 37°C for 5, 10 and 30 min, confocal microscopy (CFm) was performed. Cells were incubated with biotin-conjugated F(ab')2-anti-mouse-Ig (M + G) and streptavidin, then activated at 37°C for 5, 10 and 30 min, western blotting was performed. (A) Representative CFm images of phosphorylated CD19 (pCD19) and BCR (60× objective, scale bar = 2.5 µm). (B) Colocalization between pCD19 and BCR. (C) Western blotting of pCD19, pSyk, pCD79a expression in B cells. (D) Representative CFm images of pY and BCR (60× objective, scale bar = 2.5 µm). (E) Colocalization between pY and BCR. (F) Colocalization between pBTK and BCR. (G) Western blotting of pY expression in B cells. (H) Western blotting of pBTK and BTK expression in B cells. (I) Colocalisation between pSHIP-1 and BCR. (J) Western blotting of pSHIP-1 and SHIP-1 expression in B cells. (K) Western blotting of pBTK and pSHIP-1 in WT B cells, Ccr2-KO B cells and Ccr2-KO B cells treated with 5µM R406. (L) Representative image of intracellular Ca2+ flux kinetics in WT and Ccr2-KO B cells following stimulation with 10 µg/ml biotin-conjugated F(ab')2 anti-mouse Ig (M + G). All images were representative images from three independent experiments. The number of cells analyzed for each parameter in CFm assay was 30–50. Error bars were shown as mean (± SD). *p < .05, **p < .01, ***p < .001, ns: no statistical significance. Fig 2. PMID: 35875970.



ELISA

Individual serum Inaba vibriocidal responses for each of the four dosages (107, 108, 109, or 1010 CFU) or placebo are indicated. Within each dosage group, the five circles denote (from left to right) the following five time points: baseline and 7, 10, 14, and 28 days postvaccination. A closed circle indicates the peak response for an individual. The vibriocidal antibody assay compares the amount of V. cholerae growth achieved in a 96-well plate when mixed with guinea pig complement (p/n C300-0050) of a standard activity and serial dilutions of the heat-inactivated human serum samples, all assayed in duplicate. FIG 1. PMID: 25410205.

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