

Datasheet for D105-00-0100**Guinea Pig Serum Sterile****Overview**

Description:	Guinea Pig Serum (Sterile) - D105-00-0100
Item No.:	D105-00-0100
Size:	100 mL
Applications:	ELISA, IF, IHC, Multiplex, Other, WB
Origin:	Guinea Pig

Product Details

Background:	Guinea Pig Serum is used as a supplement to cell culture media. Guinea Pig Serum is also suitable for use as a component of bioassays, immunoassays or enzyme assays. Guinea Pig Serum provides a broad spectrum of macromolecules, carrier proteins for lipoid substances and trace elements, attachment and spreading factors, low molecular weight nutrients, and hormones and growth factors that promote cell growth and health. Be certain to maintain Good Cell Culture Practice, and maintain sterility of cultures that require media supplementation. Guinea Pig Serum is ideal for investigators in Cancer, Immunology, and Cell Biology research.
Synonyms:	Guinea Pig serum for cell culture, cell culture grade Guinea Pig serum, sterile serum from Guinea Pig
Species of Origin:	Guinea Pig

Target Details

Relevant Links:	SDS
------------------------	---

Application Details

Suggested Applications:	ELISA, IF, IHC, Multiplex, Other, WB (Based on references)
--------------------------------	--

Application Note:	pH: normal
	Immunoelectrophoresis: normal
	Hemoglobin: normal
	IgG Concentration: normal

Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
-------------------------	---

Tissue Data

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

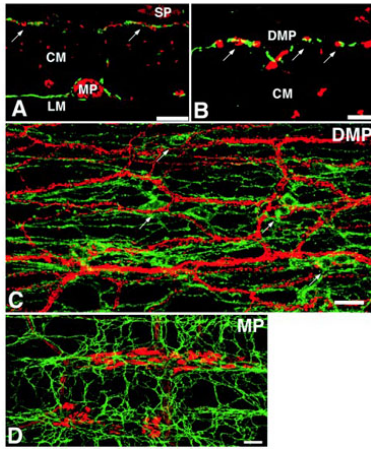
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	79 mg/ml by Refractometry
Buffer:	None
Sterility:	Sterile
Preservative:	None
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store container at -20° C prior to opening. Avoid cycles of freezing and thawing. Use aseptic technique to maintain sterility when opening product.
Expiration:	Expiration date is one (1) year from date of receipt.

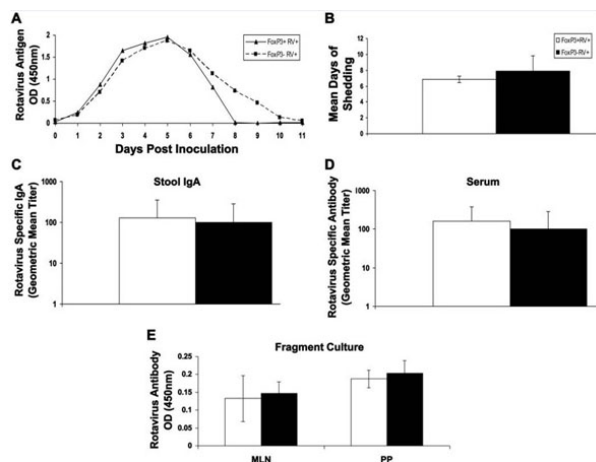
Images



Immunohistochemistry

Double-labeling immunofluorescence for c-Kit and nitric oxide synthase (NOS) in the guinea-pig small intestine. The immunofluorescence for FITC (green) and Texas Red (red) reveals c-Kit-like immunoreactivity (c-Kit-LI) and NOS-like immunoreactivity (NOS-LI), respectively. Secondary Antibodies blocked with 2% guinea-pig serum (p/n D105-00-0050) in 1% BSA-PBS.

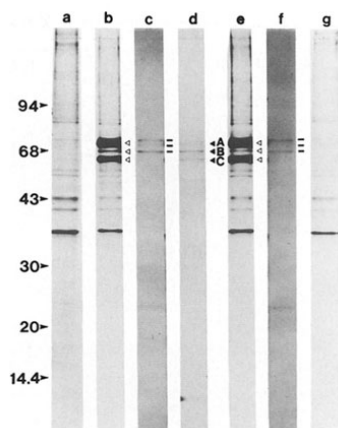
Figs. A and B were obtained from cross sections of muscle fibers of the circular muscle layer, while Figs. C and D were from whole mount preparations. DMP: deep muscular plexus, MP: myenteric plexus, SP: submucosal plexus, CM: circular muscle layer, LM: longitudinal muscle layer. (A) The overlapping of c-Kit-LI and NOS-LI is more prominent in the DMP arrows than in the myenteric plexus. The dense labeling of NOS-LI is also observed in the SP and myenteric plexus but is absent in the LM. Scale bars = 50 mm. (B) A higher magnification of the DMP. The yellow labeling indicates the close association between c-Kit-LI and NOS-LI (arrows). Scale bar = 10 mm. (C) In the DMP, c-Kit-LI exhibits several long and fine processes which constitute a network. NOS-LI bifurcates and fuses the neighboring lines, forming a dense network running parallel to the long axis of muscle fibers of the CM (in the horizontal direction of the figure). The dots or strands of the labeling with NOS-LI enclose c-Kit-LI (arrows). Scale bar = 20 mm. (D) In the myenteric plexus, NOS-LI is detected within the ganglion strands or connecting strands. In the ganglion strands, NOS-LI exhibits several short and flattened processes as well as a long and fine process. These morphological features are consistent with enteric neurons classified as Dogiel type I. c-Kit-LI constitutes the networks surrounding the ganglion strands or connecting strands. Scale bars = 50 mm. Fig. 1. PMID: 10189109.



ELISA

FoxP3⁺ regulatory T cells are not required for rotavirus clearance or rotavirus specific antibody production. FoxP3⁺ regulatory T cells were depleted from FoxP3DTR mice by intraperitoneal injection of diphtheria toxin (50µg/kg of body weight). Both depleted (black bar or dashed line) and non-depleted (white bar or solid line) mice were orally inoculated with gut homogenate containing 103 ID50 of ECwt rotavirus. Antibodies diluted in buffer containing 5% normal guinea pig serum (p/n D105-00-0050). (A) Fecal pellets were collected every day and analyzed for the presence of rotavirus by ELISA. (B) Mean days of shedding were also calculated. (C) Rotavirus specific IgA was measured in stool samples 10 dpi using ELISA. (D) Rotavirus specific antibody was measured in serum samples collected 11 dpi. (E) MLN and PP were collected 4 days post inoculation and then cultured in vitro for 4 days. Supernatants were collected and analyzed for rotavirus specific antibody using ELISA.

Figure 2. PMID: 24095866.



Immunoprecipitation

SDS-PAGE and fluorographic analysis of isoprenylated lamin polypeptides from CHO after immunoprecipitation with anti-lamin antisera. Whole cell extracts of CHO-K1 (met-18b-2) cells, labeled with 3 $\mu\text{Ci/ml}$ [^{35}S] methionine or 10 $\mu\text{Ci/ml}$ R-[2- ^{14}C]mevalonate, were precleared by incubation with nonimmune guinea pig or human sera followed by the addition of protein A-Sepharose beads and centrifugation. The resulting supernatants were incubated with either guinea pig anti-lamin (A+B+C) antiserum or human anti-lamin (A+C) autoimmune serum. Antigen-antibody complexes were then bound to protein A-Sepharose beads, washed, eluted, and examined by SDS-PAGE and fluorography. Fluorographic exposure was for 30 (14C-isoprenylated polypeptides) and 3 d (for [^{35}S]methionine-labeled polypeptides). [^{35}S]Methionine-labeled (lane b, open triangles) and 14C-isoprenylated polypeptides (lane c, bars) immunoprecipitated with guinea pig anti-lamin (A+B+C) serum. [^{35}S]Methionine-labeled (lane e, open triangles) and 14C-isoprenylated (lane f, bars) polypeptides immunoprecipitated with human anti-lamin (A+C) autoimmune serum. [^{35}S]Methionine-labeled polypeptides nonspecifically bound to preimmune guinea pig (lane a) and human (lane g) serum. Shown in lane d are Coomassie Blue-stained rat liver lamins A, B, and C (solid triangles). Molecular mass standards are presented to the left of the figure. Figure 5. PMID: 3170631.

Bottle

Guinea Pig Serum is used as a supplement to cell culture media. Guinea Pig Serum provides a broad spectrum of macromolecules, carrier proteins for lipid substances and trace elements, attachment and spreading factors, low molecular weight nutrients, and hormones and growth factors that promote cell growth and health. Be certain to maintain Good Cell Culture Practice, and maintain sterility of cultures that require media supplementation.



References

- Miller AD et al. FoxP3+ regulatory T cells are not important for rotavirus clearance or the early antibody response to rotavirus. *Microbes Infect.* (2014)
- Kanungo S et al. Safety and immunogenicity of a live oral recombinant cholera vaccine VA1.4: a randomized, placebo controlled trial in healthy adults in a cholera endemic area in Kolkata, India. *PLoS One.* (2014)
- Eisenstein TK et al. Anandamide and $\Delta 9$ -tetrahydrocannabinol directly inhibit cells of the immune system via CB2 receptors. *J Neuroimmunol.* (2007)
- Yotsushima K et al. Effects of fatty acid-free bovine serum albumin and fetal calf serum supplementing repair cultures on pre- and post-warm viability of biopsied bovine embryos produced in vitro. *J Reprod Dev.* (2004)
- Hsieh MH et al. T-cell subsets mediate graft-versus-myeloid leukemia responses via different cytotoxic mechanisms. *Biol Blood Marrow Transplant.* (2000)
- Toma H et al. Immunohistochemical distribution of c-Kit-positive cells and nitric oxide synthase-positive nerves in the guinea-pig small intestine. *J Auton Nerv Syst.* (1999)
- Sawant-Mane S et al. CD59 homologue regulates complement-dependent cytolysis of rat Schwann cells. *J Neuroimmunol.* (1996)
- Edens RE et al. Heparin and derivatized heparin inhibit zymosan and cobra venom factor activation of complement in serum. *Immunopharmacology.* (1994)
- Sawant-Mane S et al. Antibody of patients with Guillain-Barré syndrome mediates complement-dependent cytolysis of rat Schwann cells: susceptibility to cytolysis reflects Schwann cell phenotype. *J Neuroimmunol.* (1994)
- Beck LA et al. Incorporation of a product of mevalonic acid metabolism into proteins of Chinese hamster ovary cell nuclei. *J Cell Biol.* (1988)
- Lin YS et al. Inhibition of antibody production from the plasmacytoma cell line MOPC-315 by staphylococcal enterotoxin B-induced T-suppressor cells. *Cell Immunol.* (1986)
- Whitlow MB et al. Penetration of C8 and C9 in the C5b-9 complex across the erythrocyte membrane into the cytoplasmic space. *J Biol Chem.* (1985)
- Ishii Y et al. Translation of human macrophage activating factor (for glucose consumption) mRNA in *Xenopus laevis* oocytes. *Immunol Invest.* (1985)
- Ramm LE et al. Size distribution and stability of the trans-membrane channels formed by complement complex C5b-9. *Mol Immunol.* (1983)
- Ramm LE et al. Elimination of complement channels from the plasma membranes of U937, a nucleated mammalian cell line: temperature dependence of the elimination rate. *J Immunol.* (1983)
- Rosenfeld SI et al. Inhibition of the lytic action of cell-bound terminal complement components by human high density lipoproteins and apoproteins. *J Clin Invest.* (1983)
- Imagawa DK et al. Consequences of cell membrane attack by complement: release of arachidonate and formation of inflammatory derivatives. *Proc Natl Sci USA* (1983)
- Jordan RE et al. Antithrombin in vertebrate species: conservation of the heparin-dependent anticoagulant mechanism. *Arch Biochem Biophys.* (1983)
- Campos-Neto A. Immune response gene control of antibody specificity. *Cell Immunol.* (1982)

- Ramm LE et al. Size of the transmembrane channels produced by complement proteins C5b-8. *J Immunol.* (1982)
- Ramm LE et al. Transmembrane channel formation by complement: functional analysis of the number of C5b6, C7, C8, and C9 molecules required for a single channel. *Proc Natl Sci USA* (1982)
- Bucy RP et al. Ir gene control of the immune response to insulins. I. Pork insulin stimulates T cell activity in nonresponder mice. *J Immunol.* (1981)
- Ramm LE et al. Life-span and size of the trans-membrane channel formed by large doses of complement. *J Immunol.* (1980)
- Cines DB et al. Effect of anti-P1A1 antibody on human platelets. I. The role of complement. *Blood.* (1979)
- Schreiber AD et al. Effect of C3b inactivator on monocyte-bound C3-coated human erythrocytes. *Blood.* (1978)
- MacGregor RR et al. Impaired granulocyte adherence in multiple myeloma: relationship to complement system, granulocyte delivery, and infection. *Blood.* (1978)
- Campos-Neto A. T-cell regulation of restricted B-cell responses. *Adv Exp Med Biol.* (1978)
- Baltz M et al. Down regulation in B lymphocytes: low dose signals. *Eur J Cell Biol.* (1977)
- Baltz M et al. Low-dose antigenic signals to helper lymphocytes. *Cell Immunol.* (1977)
- Steshenko PP et al. Antigen recognition: the specificity of an isolated T lymphocyte population. *J Immunol.* (1977)
- Yaron A et al. Immune Ascites in the Guinea Pig: Specificity of Cells and Antibody in an Induced Peritoneal Exudate. *J Immunol.* (1977)
- Schreiber AD et al. Acquired angioedema with lymphoproliferative disorder: association of C1 inhibitor deficiency with cellular abnormality. *Blood.* (1976)
- Kenna MA et al. Effect of papain on the interaction between human monocytes, erythrocytes, and IgG. *Blood.* (1975)
- Twomey SL et al. Shortened Radioimmunoassay for Human Growth Hormone. *Clin Chem.* (1974)

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.