

Datasheet for 600-406-GK0S**Cas 9 Antibody Biotin Conjugated****Overview**

Description:	Anti-Cas9 (RABBIT) Antibody Biotin Conjugated - 600-406-GK0S
Item No.:	600-406-GK0S
Size:	25 µL
Applications:	ELISA
Reactivity:	<i>S. pyogenes</i> serotype M1
Host Species:	Rabbit

Product Details

Background:	The Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) and CRISPR Associated (Cas) system was discovered in bacteria as a defense against foreign DNA, even being believed to act as a sort of prokaryotic immune system. The Cas9 protein is becoming a useful tool in the field of genomic editing for its ability to induce site-directed double strand breaks in DNA. It can cleave almost any sequence complementary to the guide RNA and has recently been used for modifying the genome of human embryos for the first time.
Synonyms:	rabbit anti-Cas9 antibody biotin conjugation, biotin conjugated rabbit anti-Cas9 antibody, Cas-9, Cas 9, CRISPR, CRISPR-associated endonuclease Cas9/Csn1, SpCas9, SpyCas9, csn1, Cas-9 Antibody
Host Species:	Rabbit
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	cas9
Reactivity:	<i>S. pyogenes</i> serotype M1
Immunogen Type:	Conjugated Peptide

Immunogen:	Cas-9 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region near the C-terminal of Streptococcus pyogenes Cas-9 protein.
Purity/Specificity:	Anti-Cas9 antibody is directed against Streptococcus pyogenes Cas-9. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography.
Relevant Links:	• GeneID - 901176 • NCBI - NP_269215.1 • UniProtKB - Q99ZW2

Application Details

Tested Applications:	ELISA
Application Note:	Cas9 Biotin Conjugated Antibody has been tested for use in ELISA and suitable for Immunofluorescence and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band ~158 kDa in size corresponding to Cas-9 protein by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:25,000-1:30,000
IF:	1µg/mL
WB:	1µg/mL
Other:	User Optimized

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

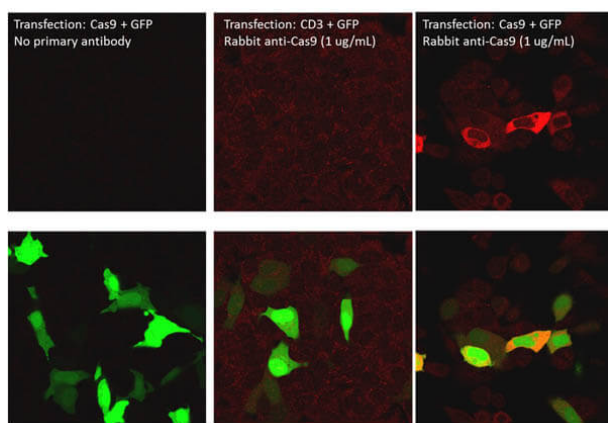
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

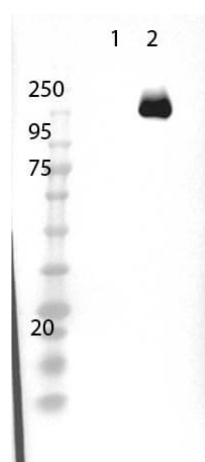
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence of Rabbit Anti-Cas9 Antibody. Cells: HeLa cells transfected with GFP+Cas9 or GFP+CD-3. Fixation: Formaldehyde fixed, permeabilized Triton X-100. Primary: Anti-Cas9 used at 1µg/mL. Secondary: Donkey anti-Rabbit at 1µg/mL, staining seen in red. Bottom images show GFP stain overlay.



Western Blot

Western Blot of Rabbit Anti-Cas9 Antibody. Lane 1: 293T non transfected cell lysate. Lane 2: 293T Cas9 over expressed cell lysate. Load: 15µg per lane. Primary Antibody cas9 used at 1µg/mL using MB-070 overnight at 4°C. Secondary Antibody: goat anti-rabbit HRP at 1:40,000 for 30 min at room temp. Expect: 158kDa.

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.