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Datasheet for 600-442-GK0

Cas 9 Antibody DyLight™549 Conjugated

Overview

Description:	Anti-Cas9 (RABBIT) Antibody DyLight™549 Conjugated - 600-442-GK0
Item No.:	600-442-GK0
Size:	100 µg
Applications:	WB
Reactivity:	S. pyogenes 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 DyLight™ 549 conjugation, DyLight™ 549 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:	DyLight™ 549
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	4.8

Target Details

Gene Name:	cas9
Reactivity:	S. pyogenes 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:	WB
Application Note:	Cas9 DyLight™549 Conjugated Antibody has been tested for use in ELISA and western blotting and is suitable for Immunofluorescence. 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:	1ug/ml
WB:	1ug/ml
Other:	User Optimized

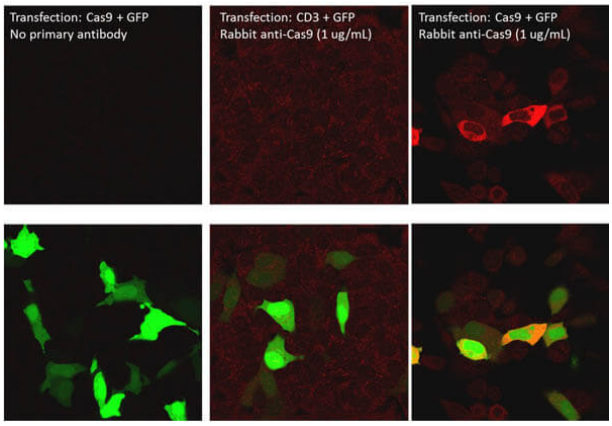
Formulation

Physical State:	Lyophilized
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
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

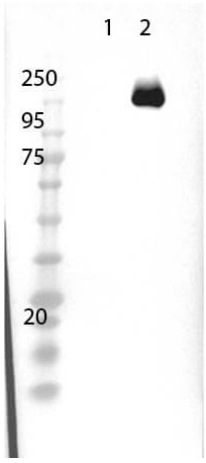
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
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.