

Datasheet for 600-401-Y47**APOBEC3G Antibody****Overview**

Description:	Anti-APOBEC3G (RABBIT) Antibody - 600-401-Y47
Item No.:	600-401-Y47
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	The Apolipoprotein B mRNA-editing, enzyme-catalytic, polypeptide-like (APOBEC) 3 is a multi-isoform member of the cytidine deaminase family of enzymes that act on monomeric nucleoside and nucleotide substrates. Similar to TRIM5a which targets incoming retroviral capsids, APOBEC3 plays a major role in cellular defense against retroviral infection as at least two isoforms, APOBEC3G and to a lesser extent APOBEC3F, can be incorporated HIV-1 virions and induce hypermutation in the newly synthesized viral DNA and thus destabilize the viral genome. This innate mechanism of retroviral resistance is counteracted by the HIV-1 Vif protein by inducing the ubiquitization and degradation of APOBEC3G; a single amino acid substitution (D128K) blocks APOBEC3G depletion without affecting its inhibitory activity.
Synonyms:	APOBEC3G Antibody, A3G, ARCD, ARP9, ARP-9, CEM15, CEM-15, MDS019, bK150C2.7, dJ494G10.1APOBEC-related cytidine deaminase, APOBEC-related protein
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	APOBEC3G
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-APOBEC3G antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to 15 amino acids near the amino-terminus of human APOBEC3G.
Purity/Specificity:	Anti-APOBEC3G Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. APOBEC3G antibody will also detect the APOBEC3F isoform.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - Q9HC16• GeneID - 60489• NCBI - NP_068594

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	Anti-APOBEC3G Antibody has been tested for use in ELISA, Western Blotting, and Immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 46 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:50,000
IHC:	1 µg/mL
WB:	5 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

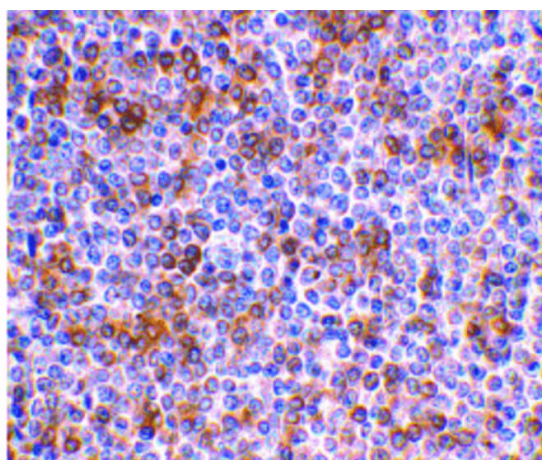
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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.

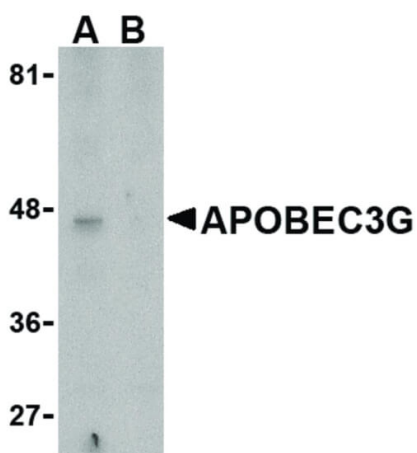
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Immunohistochemistry of APOBEC3G antibody. Tissue: human spleen tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: APOBEC3G antibody at 1 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: APOBEC3G is nuclear and cytoplasmic. Staining: APOBEC3G is stained with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of APOBEC3G antibody. Lane A: Caco-2 cell lysate. Lane B: Caco-2 cell lysate in the presence of blocking peptide. Load: 35 µg per lane. Primary antibody: APOBEC3G antibody at 5 µg/mL for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 46 kDa, 46 kDa for APOBEC3G. Other band(s): APOBEC3G splice variants and isoforms.

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.