




## Product datasheet

# Anti-APOBEC3G/A3G antibody ab109727

3 Images

### Overview

<b>Product name</b>	Anti-APOBEC3G/A3G antibody
<b>Description</b>	Goat polyclonal to APOBEC3G/A3G
<b>Host species</b>	Goat
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Cynomolgus monkey 
<b>Immunogen</b>	Synthetic peptide corresponding to Human APOBEC3G/A3G aa 365-376 (C terminal). Sequence: C-DEHSQDLSGRLR  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a> 
<b>Positive control</b>	Daudi cell lysate, Human kidney and Human testis tissues
<b>General notes</b>	<p>Previously labelled as APOBEC3G</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications &amp; species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&amp;As.</p>

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab109727** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.5 - 1.5 µg/ml. Detects a band of approximately 45 kDa (predicted molecular weight: 46 kDa).
IHC-P		Use a concentration of 2.5 µg/ml.

## Target

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<b>Function</b>	DNA deaminase (cytidine deaminase) that mediates a form of innate resistance to retroviral infections (at least to HIV-1 infection) by triggering G-to-A hypermutation in the newly synthesized viral DNA. The replacements C-to-U in the minus strand DNA of HIV-1 during reverse transcription, leads to G-to-A transitions in the plus strand. The inhibition of viral replication is either due to the degradation of the minus strand before its integration or to the lethality of the hypermutations. Modification of both DNA strands is not excluded. This antiviral activity is neutralized by the virion infectivity factor (VIF), that prevents the incorporation of APOBEC3G into progeny HIV-1 virions by both inhibiting its translation and/or by inducing its ubiquitination and subsequent degradation by the 26S proteasome. APOBEC3G binds a variety of RNAs, but does not display detectable APOB, NF1 and NAT1 mRNA editing.
<b>Tissue specificity</b>	Expressed in spleen, testes, ovary and peripheral blood leukocytes and CD4+ lymphocytes. Also expressed in non-permissive peripheral blood mononuclear cells, and several tumor cell lines; no expression detected in permissive lymphoid and non-lymphoid cell lines.
<b>Sequence similarities</b>	Belongs to the cytidine and deoxycytidylate deaminase family.
<b>Post-translational modifications</b>	Ubiquitinated in the presence of HIV-1 VIF. Association with VIF targets the protein for proteolysis by the ubiquitin-dependent proteasome pathway.
<b>Cellular localization</b>	Cytoplasm. Nucleus. Mainly cytoplasmic. Small amount are found in the nucleus. During HIV-1 infection, virion-encapsidated in absence of HIV-1 VIF.

## Images

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250kDa  
150kDa  
100kDa  
75kDa  
50kDa  
37kDa  
25kDa  
20kDa  
15kDa

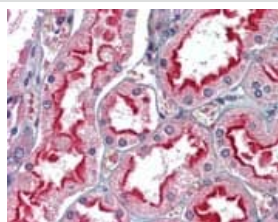
Western blot - Anti-APOBEC3G/A3G antibody  
(ab109727)

Anti-APOBEC3G/A3G antibody (ab109727) at 0.5 µg/ml + Daudi  
cell lysate (in RIPA buffer) at 35 µg/ml

Developed using the ECL technique.

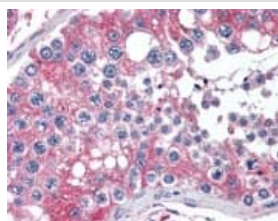
**Predicted band size:** 46 kDa

Primary incubation was 1 hour



Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-APOBEC3G/A3G  
antibody (ab109727)

ab109727 at a concentration of 2.5 µg/ml staining  
APOBEC3G/A3G in Human Kidney, Formalin-Fixed, Paraffin-  
Embedded section.



Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-APOBEC3G/A3G  
antibody (ab109727)

ab109727 at a concentration of 2.5 µg/ml staining  
APOBEC3G/A3G in Human Testis, Formalin-Fixed, Paraffin-  
Embedded section.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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