






## Product datasheet

# Anti-APOBEC3G/A3G antibody ab109727

[1 References](#) [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 350-450 (C terminal).  <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>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&amp;As</p>

### Properties

<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

## The Abpromise guarantee

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

### Function

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.

### Tissue specificity

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.

### Sequence similarities

Belongs to the cytidine and deoxycytidylate deaminase family.

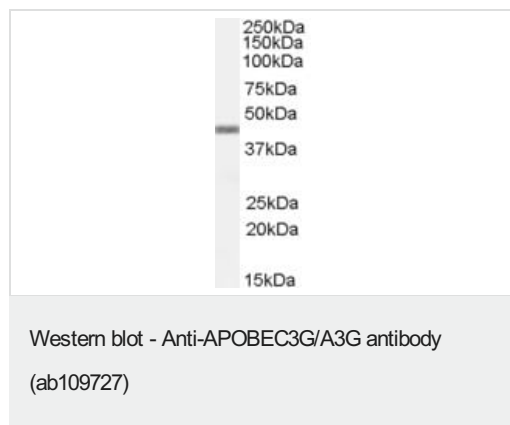
### Post-translational modifications

Ubiquitinated in the presence of HIV-1 VIF. Association with VIF targets the protein for proteolysis by the ubiquitin-dependent proteasome pathway.

### Cellular localization

Cytoplasm. Nucleus. Mainly cytoplasmic. Small amount are found in the nucleus. During HIV-1 infection, virion-encapsidated in absence of HIV-1 VIF.

## Images

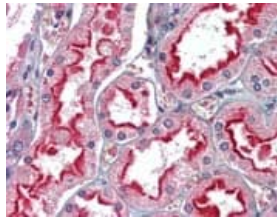


Anti-APOBEC3G/A3G antibody (ab109727) at 0.5 µg/ml + Daudi cell lysate (in RIPA buffer) at 35 µg/ml

Developed using the ECL technique.

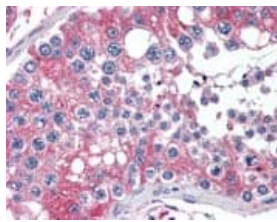
**Predicted band size:** 46 kDa

Primary incubation was 1 hour



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.

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

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

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