




Product datasheet

Anti-APOBEC3G/A3G antibody ab194581

[1 References](#) [1 Image](#)

Overview

Product name	Anti-APOBEC3G/A3G antibody
Description	Rabbit polyclonal to APOBEC3G/A3G
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Rat, Human Predicted to work with: Gorilla 
Immunogen	Recombinant fragment corresponding to Human APOBEC3G/A3G aa 50-350. Database link: Q9HC16  Run BLAST with  Run BLAST with
Positive control	WB: A-549, Jurkat, HeLa and PC-3 cell lysates; Rat lung and spleen tissue lysates.
General notes	<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&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol, 49% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab194581 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		1/500 - 1/2000. Predicted molecular weight: 46 kDa.

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.

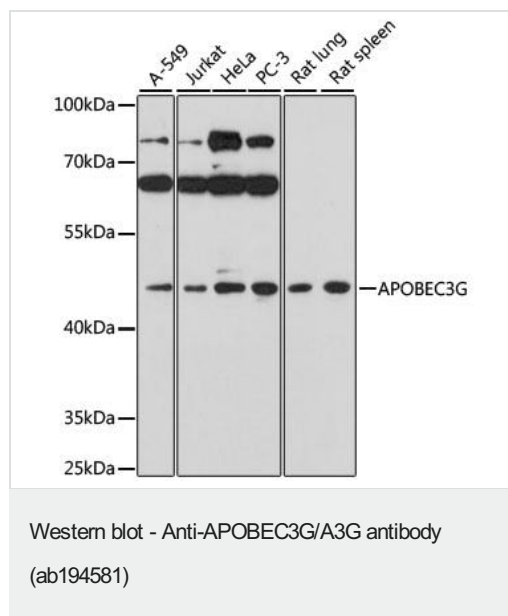
Post-translational modifications

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



All lanes : Anti-APOBEC3G/A3G antibody (ab194581) at 1/1000 dilution

Lane 1 : A-549 cell lysate

Lane 2 : Jurkat cell lysate

Lane 3 : HeLa cell lysate

Lane 4 : PC-3 cell lysate

Lane 5 : Rat lung tissue lysate

Lane 6 : Rat spleen tissue lysate

Lysates/proteins at 25 µg per lane.

Secondary

All lanes : HRP Goat Anti-Rabbit IgG (H+L)

Developed using the ECL technique.

Predicted band size: 46 kDa

Exposure time: 3 minutes

Blocking buffer: 3% nonfat dry milk in TBST.

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

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