

ARG59541 anti-APOBEC3A / PHO1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes APOBEC3A / PHO1
Tested Reactivity	Hu, Ms
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	APOBEC3A / PHO1
Species	Human
Immunogen	Recombinant protein corresponding to M1-L63 of Human APOBEC3A / PHO1.
Conjugation	Un-conjugated
Alternate Names	DNA dC->dU-editing enzyme APOBEC-3A; A3A; Phorbolin-1; EC 3.5.4.-

Application Instructions

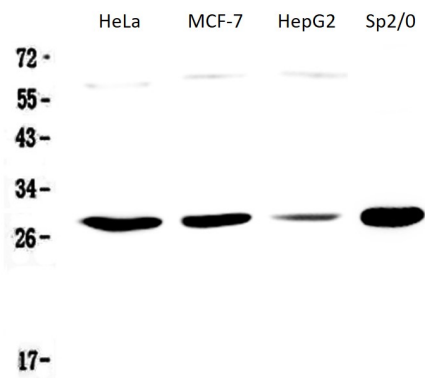
Application table	Application	Dilution
	FACS	1:150 - 1:500
	WB	0.1 - 0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

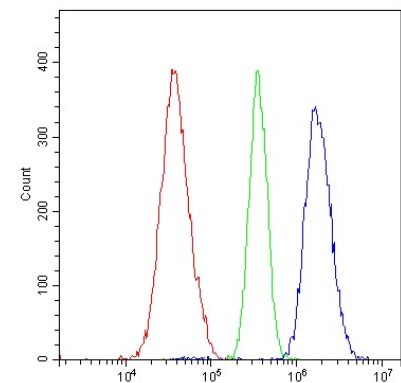
Gene Symbol	APOBEC3A_B
Gene Full Name	APOBEC3A and APOBEC3B deletion hybrid
Background	<p>This gene is a member of the cytidine deaminase gene family. It is one of seven related genes or pseudogenes found in a cluster, thought to result from gene duplication, on chromosome 22. Members of the cluster encode proteins that are structurally and functionally related to the C to U RNA-editing cytidine deaminase APOBEC1. The protein encoded by this gene lacks the zinc binding activity of other family members. The protein plays a role in immunity, by restricting transmission of foreign DNA such as viruses. One mechanism of foreign DNA restriction is deamination of foreign double-stranded DNA cytidines to uridines, which leads to DNA degradation. However, other mechanisms are also thought to be involved, as anti-viral effect is not dependent on deaminase activity. The protein encoded by this gene is the same as that encoded by APOBEC3A; however, this gene is a hybrid gene that results from the deletion of approximately 29.5 kb of sequence between the APOBEC3A gene and the adjacent gene APOBEC3B. The breakpoints of the deletion are within the two genes, so the deletion hybrid is predicted to have the promoter and coding region of APOBEC3A, but the 3' UTR of APOBEC3B. [provided by RefSeq, Jul 2012]</p>
Function	<p>DNA deaminase (cytidine deaminase) with restriction activity against viruses, foreign DNA and mobility of retrotransposons. Exhibits antiviral activity against adeno-associated virus (AAV) and human T-cell leukemia virus type 1 (HTLV-1) and may inhibit the mobility of LTR and non-LTR retrotransposons. Selectively targets single-stranded DNA and can deaminate both methylcytosine and cytosine in foreign DNA. Can induce somatic hypermutation in the nuclear and mitochondrial DNA. May also play a role in the epigenetic regulation of gene expression through the process of active DNA demethylation. [UniProt]</p>
Calculated Mw	23 kDa
Cellular Localization	Nucleus. Cytoplasm. [UniProt]

Images



ARG59541 anti-APOBEC3A / PHO1 antibody WB image

Western blot: 50 µg of samples under reducing conditions. HeLa, MCF-7, HepG2 and Sp2/0 whole cell lysates stained with ARG59541 anti-APOBEC3A / PHO1 antibody at 0.5 µg/ml, overnight at 4°C.



ARG59541 anti-APOBEC3A / PHO1 antibody FACS image

Flow Cytometry: A549 cells were blocked with 10% normal goat serum and then stained with ARG59541 anti-APOBEC3A / PHO1 antibody (blue) at 1 µg/10⁶ cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1 µg/10⁶ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.