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APOBEC3G / ARP9 Antibody (internal region)

Peptide-affinity purified goat antibody

Catalog # AF2436a

Specification

APOBEC3G / ARP9 Antibody (internal region) - Product Information

Application	IHC
Primary Accession	O9HC16
Other Accession	NP_068594.1, 60489
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	46408

APOBEC3G / ARP9 Antibody (internal region) - Additional Information

Gene ID 60489

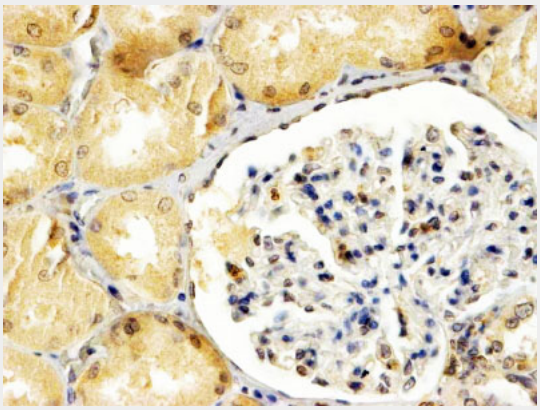
Other Names
DNA dC->dU-editing enzyme APOBEC-3G, 3.5.4.-, APOBEC-related cytidine deaminase, APOBEC-related protein, ARCD, APOBEC-related protein 9, ARP-9, CEM-15, CEM15, Deoxycytidine deaminase, A3G, APOBEC3G

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
APOBEC3G / ARP9 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

APOBEC3G / ARP9 Antibody (internal region) - Protein Information



AF2436a (4 µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with Tris/EDTA buffer pH 9, HRP-staining.

APOBEC3G / ARP9 Antibody (internal region) - References

Cellular APOBEC3G restricts HIV-1 infection in resting CD4(+) T cells. Chiu YL, Soros VB, Kreisberg JF, Stopak K, Yonemoto W, Greene WC. Nature. 2005 Apr 13; [Epub ahead of print] PMID: 15829920 ; 15809227

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Name APOBEC3G

Function
DNA deaminase (cytidine deaminase) which acts as an inhibitor of retrovirus replication and retrotransposon mobility via deaminase- dependent and -independent mechanisms. Exhibits potent antiviral activity against Vif-deficient HIV-1. After the penetration of retroviral nucleocapsids into target cells of infection and the initiation of reverse transcription, it can induce the conversion of cytosine to uracil in the minus-sense single-strand viral DNA, leading to G-to-A hypermutations in the subsequent plus-strand viral DNA. The resultant detrimental levels of mutations in the proviral genome, along with a deamination-independent mechanism that works prior to the proviral integration, together exert efficient antiretroviral effects in infected target cells. Selectively targets single-stranded DNA and does not deaminate double-stranded DNA or single- or double-stranded RNA. Exhibits antiviral activity also against simian immunodeficiency viruses (SIVs), hepatitis B virus (HBV), equine infectious anemia virus (EIAV), xenotropic MuLV-related virus (XMRV) and simian foamy virus (SFV). May inhibit the mobility of LTR and non-LTR retrotransposons.

Cellular Location
Cytoplasm. Nucleus. Cytoplasm, P-body. Note=Mainly cytoplasmic. Small amount are found in the nucleus. During HIV-1 infection, virion-encapsidated in absence of HIV-1 Vif

Tissue Location
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 Exists only in the LMM form in peripheral blood-derived resting CD4 T- cells and monocytes, both of which are refractory to HIV-1 infection LMM is converted to a HMM complex when resting CD4 T-cells are activated or when monocytes are induced to differentiate into macrophages. This change correlates with increased susceptibility of these cells to HIV-1

infection.

APOBEC3G / ARP9 Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture