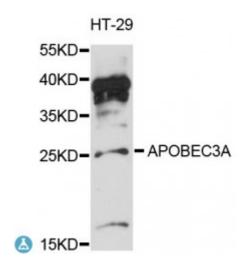


## **Anti-APOBEC3A Antibody**



**Description** 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. Two transcript variants encoding different isoforms have been found for this gene.

Model STJ114275

**Host** Rabbit

**Reactivity** Human

**Applications** WB

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 1-199 of human APOBEC3A (NP\_663745.1).

**Gene ID** <u>100913187</u>

Gene Symbol APOBEC3A

**Dilution range** WB 1:200 - 1:500

**Tissue Specificity** Expressed in peripheral leukocytes with higher expression in CD14-positive

phagocytic cells, Highly expressed in keratinocytes and in periphery blood monocytes, Also detected in non-lymphoid tissues including lung and adipose tissues, Found at high levels in colorectal adenocarcinoma, Burkitt's

lymphoma and chronic myelogenous leukemia

**Purification** Affinity purification

**Note** For Research Use Only (RUO).

**Protein Name** DNA dC->dU-editing enzyme APOBEC-3A A3A

Molecular Weight 23.012 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Storage Instruction** Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:17343OMIM:607109Reactome:R-HSA-72200

Alternative Names DNA dC->dU-editing enzyme APOBEC-3A A3A

**Function** 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,

Cellular Localization Nucleus, Cytoplasm

St John's Laboratory Ltd

**F** +44 (0)207 681 2580

T+44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com