

**Anti-APOBEC3D Antibody**  
**Catalog # AP54047****Specification****Anti-APOBEC3D Antibody - Product Information**

Application	WB, IH
Primary Accession	<a href="#">Q96AK3</a>
Other Accession	<a href="#">Q8IUX4</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46598

**Anti-APOBEC3D Antibody - Additional Information****Other Names**

APOBEC3D; Probable DNA dC->dU-editing enzyme APOBEC-3D; APOBEC3F; DNA dC->dU-editing enzyme APOBEC-3F; Apolipoprotein B mRNA-editing enzyme catalytic polypeptide-like 3F

**Target/Specificity**

Recognizes endogenous levels of APOBEC3D protein.

**Dilution**

WB~~1/500 - 1/1000

IH~~1/50 - 1/200

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-APOBEC3D Antibody - Protein Information**

**Name** APOBEC3D ([HGNC:17354](#))

**Function**

DNA deaminase (cytidine deaminase) which acts as an inhibitor of retrovirus replication and retrotransposon mobility via deaminase- dependent and -independent mechanisms (PubMed:<a href="http://www.uniprot.org/citations/16920826" target="\_blank">16920826</a>, PubMed:<a href="http://www.uniprot.org/citations/20062055" target="\_blank">20062055</a>, PubMed:<a href="http://www.uniprot.org/citations/21835787" target="\_blank">21835787</a>). Exhibits antiviral activity against 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 (PubMed:<a href="http://www.uniprot.org/citations/16920826" target="\_blank">16920826</a>). 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. Inhibits also the mobility of LTR and non-LTR retrotransposons (PubMed:<a href="http://www.uniprot.org/citations/27428332" target="\_blank">27428332</a>).

**Cellular Location**

Cytoplasm. Cytoplasm, P-body

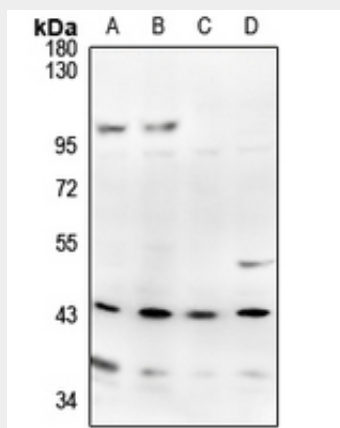
**Tissue Location**

Expressed in lymphoid organs. Also detected in non- lymphoid tissues including lung.

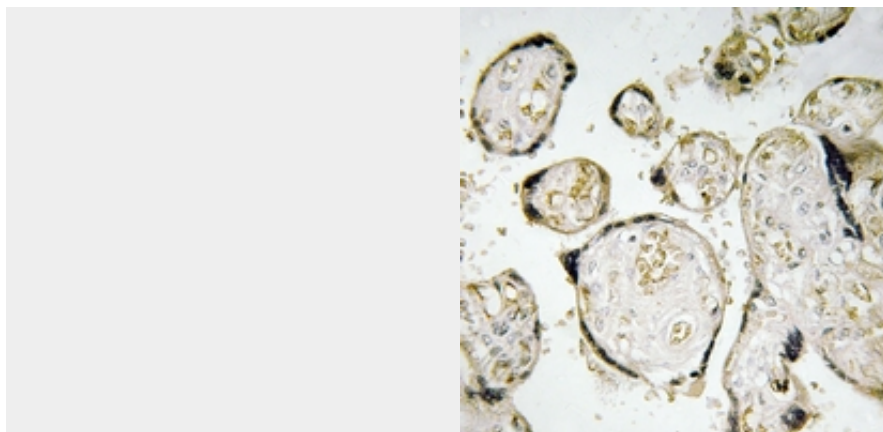
**Anti-APOBEC3D Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-APOBEC3D Antibody - Images**

Western blot analysis of APOBEC3D expression in H1792 (A), SKOV3 (B), H9C2 (C), MEF (D) whole cell lysates.



Immunohistochemical analysis of APOBEC3D staining in human placenta formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-APOBEC3D Antibody - Background**

Rabbit polyclonal antibody to APOBEC3D