

# Anti-APOBEC3D Antibody

Catalog # AP54047

#### **Product Information**

**Application** WB **Q96AK3 Primary Accession Other Accession Q8IUX4** 

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal Calculated MW 46598

### Additional Information

140564 Gene ID

**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 KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human APOBEC3D. The exact sequence is proprietary.

**Dilution** WB~~1/500 - 1/1000

**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

## **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:16920826, PubMed:20062055, PubMed:21835787). 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: 16920826). 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. Also inhibits the

mobility of LTR and non-LTR retrotransposons (PubMed:27428332).

Cellular Location Cytoplasm. Cytoplasm, P-body

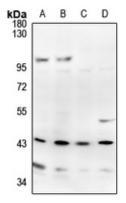
**Tissue Location** Expressed in lymphoid organs. Also detected in non-lymphoid tissues

including lung.

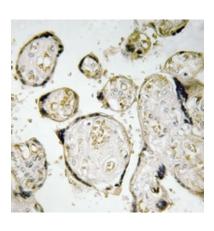
## **Background**

Rabbit polyclonal antibody to APOBEC3D

# **Images**



Western blot analysis of APOBEC3D expression in H1792 (A), SKOVCAR3 (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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.