

# Rabbit Anti-APOBEC3C antibody

# SL12495R

Product Name:	APOBEC3C
Chinese Name:	载LipoproteinB-mRNA编辑酶复合物3C抗体
Alias:	ABC3C_HUMAN; APOBEC1 like; APOBEC1-like; APOBEC1L; APOBEC3C; Apolipoprotein B mRNA editing enzyme catalytic polypeptide like 3C; ARDC2; ARDC4; ARP5; bK150C2.3; MGC19485; PBI; Phorbolin I; Phorbolin I protein; Probable DNA dC dU editing enzyme APOBEC 3C; Probable DNA dC->dU-editing enzyme APOBEC-3C.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	23kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human APOBEC3C:121-190/190
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	APOBEC proteins inhibit retroviruses by deaminating cytosine residues of viral RNA and DNA. The seven APOBEC3 genes or pseudogenes are found in a cluster thought to result from gene duplication on chromosome 22. Like APOBEC3G, APOBEC3F

deaminates deoxycytosine to deoxyuracil in the minus strand of HIV-1 DNA, resulting in G to A hypermutation in the plus strand of DNA. Thus, APOBEC3G and APOBEC3F provide a mechanism for innate immunity to retroviruses, and are also likely contribute to sequence variation observed in many viruses. Viral infectivity factor (Vif) imparts APOBEC3G and APOBEC3F resistance to HIV through impaired translation of their mRNA and accelerated posttranslational degradation of the APOBEC3 proteins by the 26S proteasome. Interestingly, HIV-1 Vif cannot form a complex with APOBEC3G or APOBEC3F of mouse origin as it does with the human protein, and thus mouse APOBEC3G and APOBEC3F function as a potent inhibitors of wildtype HIV-1 replication, where human APOBEC3G and APOBEC3F are only able to inhibit Vifdeficient HIV-1 replication. This implies that induction of APOBEC3G and APOBEC3F activity or a method of blocking their interaction with Vif may provide a method for therapeutic intervention.

## **Function:**

Host cellular restriction factor that may have antiviral activities against exogenous and endogenous viruses, as well as retrotransposons. May also play a role in the epigenetic regulation of gene expression through the process of active DNA demethylation.

#### **Subunit:**

Homodimer. Interacts with human foamy virus protein Bet; this interaction does not induce APOBEC3C degradation, but prevents dimerization and incorporation into virion of the latter. Interacts with TRIB3 and EIF2C2/AGO2.

### Subcellular Location:

Nucleus. Cytoplasm.

# Tissue Specificity:

Expressed in spleen, testes, peripherical blood lymphocytes, heart, thymus, prostate and ovary.

#### Similarity:

Belongs to the cytidine and deoxycytidylate deaminase family.

#### **SWISS:**

Q9NRW3

#### Gene ID:

27350

#### Database links:

Entrez Gene: 27350Human

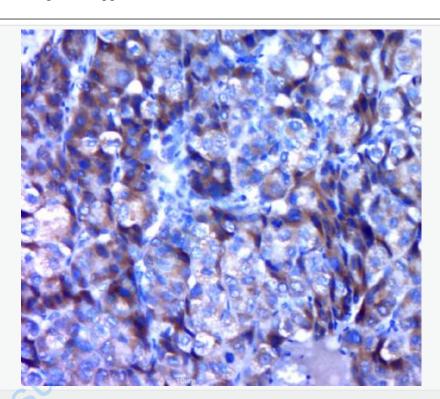
Omim: 607750Human

SwissProt: O9NRW3Human

<u>Unigene: 441124</u>Human

# **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



## Picture:

Paraformaldehyde-fixed, paraffin embedded (human liver carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (APOBEC3C) Polyclonal Antibody, Unconjugated (SL12495R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.