

Apobec1 Antibody (N-term) Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1352a

#### Specification

## Apobec1 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P,E P41238 NP\_001635 Human, Mouse Rabbit Polyclonal Rabbit IgG 7-36

#### Apobec1 Antibody (N-term) - Additional Information

Gene ID 339

**Other Names** C->U-editing enzyme APOBEC-1, 354-, Apolipoprotein B mRNA-editing enzyme 1, HEPR, APOBEC1

Target/Specificity This Apobec1 antibody is generated from rabbits im

This Apobec1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 7-36 amino acids from the N-terminal region of human Apobec1.

Dilution WB~~1:1000 IHC-P~~1:50~100 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

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

Precautions

Apobec1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### Apobec1 Antibody (N-term) - Protein Information

Name APOBEC1 (<u>HGNC:604</u>)

Function Cytidine deaminase catalyzing the cytidine to uridine postranscriptional editing of a



variety of mRNAs (PubMed:<u>30844405</u>). Form complexes with cofactors that confer differential editing activity and selectivity. Responsible for the postranscriptional editing of a CAA codon for Gln to a UAA codon for stop in the apolipoprotein B mRNA (PubMed:<u>24916387</u>). Also involved in CGA (Arg) to UGA (Stop) editing in the NF1 mRNA (PubMed:<u>11727199</u>). May also play a role in the epigenetic regulation of gene expression by participating in DNA demethylation (By similarity).

Cellular Location Cytoplasm. Nucleus

**Tissue Location** Expressed exclusively in the small intestine.

## Apobec1 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Apobec1 Antibody (N-term) - Images



Anti-Apobec1 Antibody (E22) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 28 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



The anti-Apobec1 N-term Pab (Cat. #AP1352a) is used in Western blot to detect Apobec in mouse small intestine tissue lysate.

## Apobec1 Antibody (N-term) - Background

APOBEC1 is involved in the production of apolipoprotein B (apoB)-48 from apoB-100. The gene spans 18 kb and contains five exons, all of which are translated. Alternative splicing produces a variant transcript that lacks exon 2 and encodes a novel 36-amino acid peptide. The exon 2-skipped transcript accounts for approximately 50% of APOBEC1 mRNA in the adult small intestine and up to 90% of APOBEC1 mRNA in the developing gut. Exon 2-skipping may thus be a quantitatively important mechanism for regulating the expression of this gene in the gastrointestinal tract.

# Apobec1 Antibody (N-term) - References

Blanc, V., et al., J. Biol. Chem. 278(42):41198-41204 (2003). Chester, A., et al., EMBO J. 22(15):3971-3982 (2003). Wedekind, J.E., et al., Trends Genet. 19(4):207-216 (2003). Mukhopadhyay, D., et al., Am. J. Hum. Genet. 70(1):38-50 (2002). Dance, G.S., et al., J. Biol. Chem. 277(15):12703-12709 (2002).