
APOBEC3C Rabbit pAb

Catalog Number: bs-12495R

Target Protein: APOBEC3C

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), ICC/IF (1:50)

Reactivity: Human

Predicted MW: 23 kDa

Entrez Gene: 27350

Swiss Prot: Q9NRW3

Source: KLH conjugated synthetic peptide derived from human APOBEC3C: 121-190/190.

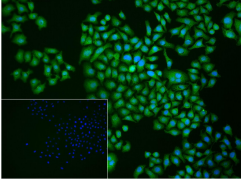
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

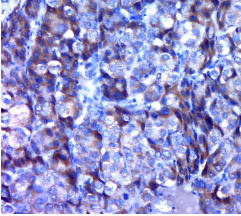
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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 Vif-deficient 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.

VALIDATION IMAGES



4% Paraformaldehyde-fixed HepG2(H) cell; Triton X-100 at r.t. for 20 min; Antibody incubation with (APOBEC3C) polyclonal Antibody, unconjugated (bs-12495R) 1:50, 90 min at 37°C; followed by conjugated Goat Anti-Rabbit IgG antibody (green, bs-0295G-FITC) at 37°C for 90 min, DAPI (blue, C02-04002) was used to stain the cell nuclei. PBS instead of the primary antibody was used as the blank control.



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 (bs-12495R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

PRODUCT SPECIFIC PUBLICATIONS

[IF=2.311] Sui S et al. Association between APOBEC3s and HPV16 E2 gene hypermutation in Uygur females with cervical cancer. *Oncol Lett* . 2020 Aug;20(2):1752-1760. WB ; Human . 32724418

[IF=2.311] Shuang Sui. et al. Association between APOBEC3s and HPV16 E2 gene hypermutation in Uygur females with cervical cancer. *Oncol Lett*. 2020 Aug;20(2):1752-1760 WB ; Human . 32724418