

APOBEC3G (NT) antibody (pAb)

Rabbit Anti-Human APOBEC3G (HIV Restriction Factor)

Instruction Manual

Catalog Number	PK-AB718-3257
Synonyms	APOBEC3G Antibody:
Description	The Apolipoprotein B mRNA-editing, enzyme-catalytic, polypeptide-like (APOBEC) 3 is a multi-isoform member of the cytidine deaminase family of enzymes that act on monomeric nucleoside and nucleotide substrates. Similar to TRIM5 α which targets incoming retroviral capsids, APOBEC3 plays a major role in cellular defense against retroviral infection as at least two isoforms, APOBEC3G and to a lesser extent APOBEC3F, can be incorporated HIV-1 virions and induce hypermutation in the newly synthesized viral DNA and thus destabilize the viral genome. This innate mechanism of retroviral resistance is counteracted by the HIV-1 Vif protein by inducing the ubiquitization and degradation of APOBEC3G; a single amino acid substitution (D128K) blocks APOBEC3G depletion without affecting its inhibitory activity.
Quantity	100 μ g
Source / Host	Rabbit
Immunogen	Rabbit polyclonal APOBEC3G antibody was raised against a synthetic peptide corresponding to 15 amino acids near the amino-terminus of human APOBEC3G (Genbank accession No. NP_068594). APOBEC3G antibody will also detect the APOBEC3F isoform.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human
Specificity	APOBEC3G antibody will also detect the APOBEC3F isoform.
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 μ l or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.h application have to be determined individually. APOBEC3G antibody can be used for detection of APOBEC3G by Western blot at 5 μ g/mL. Antibody can also be used for immunohistochemistry starting at 1 μ g/mL.
Images	Available upon request.
References	Jarmuz A, Chester A, Bayliss J, et al. An anthropoid-specific locus of Orphan C to U RNA-editing enzymes on chromosome 22. <i>Genomics</i> 2002; 79:285-96. Stremlau M, Owens CM, Perron MJ, et al. The cytoplasmic body component TRIM5 α restricts HIV-1 infection in Old World monkeys. <i>Nature</i> 2004; 427:848-53. Bieniasz PD. Intrinsic immunity: a front-line defense against viral attack. <i>Nat Immunol.</i> 2004; 5:1109-15. Sheehy AM, Gaddis NC, Choi JD, et al. Isolation of a human gene that inhibits HIV-1 infection and is suppressed by the viral Vif protein. <i>Nature</i> 2002; 418:646-50.
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-3257P Caco-2 Cell Lysate, Cat. No. PK-AB718-1223 TRIM5-alpha Antibody (CT), Cat. No. PK-AB718-3249 TRIM5-alpha Antibody (IN1), Cat. No. PK-AB718-3247 TRIM5-alpha Antibody (IN2), Cat. No. PK-AB718-3251

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