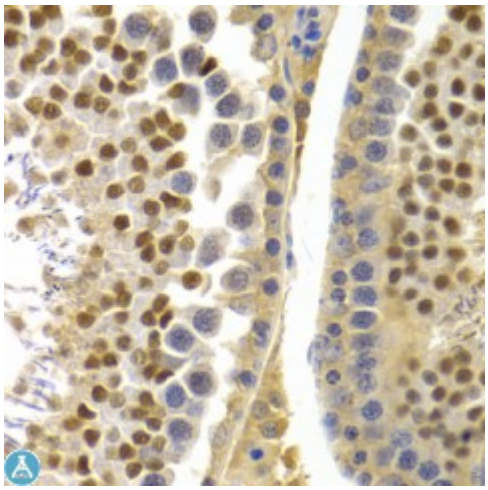
Anti-APOBEC3G Antibody



Description	This gene is a member of the cytidine deaminase gene family. It is one of seven related genes or pseudogenes found in a cluster, thought to result from gene duplication, on chromosome 22. Members of the cluster encode proteins that are structurally and functionally related to the C to U RNA-editing cytidine deaminase APOBEC1. The protein encoded by this gene catalyzes site-specific deamination of both RNA and single-stranded DNA. The encoded protein has been found to be a specific inhibitor of human immunodeficiency virus-1 (HIV-1) infectivity.

Model	STJ115559
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	IF, IHC
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 60-330 of human APOBEC3G (NP_068594.1).
Gene ID	60489
Gene Symbol	APOBEC3G
Dilution range	IHC 1:50 - 1:200 IF 1:50 - 1:200
Tissue Specificity	Expressed in spleen, testes, ovary and peripheral blood leukocytes and CD4+ lymphocytes, Also expressed in non-permissive peripheral blood mononuclear cells, and several tumor cell lines
Purification	Affinity purification
Note	For Research Use Only (RUO).

Protein Name	DNA dC->dU-editing enzyme APOBEC-3G
Molecular Weight	46.408 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:17357OMIM:607113Reactome:R-HSA-180585
Alternative Names	DNA dC->dU-editing enzyme APOBEC-3G
Function	DNA deaminase (cytidine deaminase) which acts as an inhibitor of retrovirus replication and retrotransposon mobility via deaminase-dependent and -independent mechanisms, Exhibits potent antiviral activity against vif-deficient 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, 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, Exhibits antiviral activity also against simian immunodeficiency viruses (SIVs), hepatitis B virus (HBV), equine infectious anemia virus (EIAV), xenotropic MuLV-related virus (XMRV) and simian foamy virus (SFV), May inhibit the mobility of LTR and non-LTR retrotransposons,
Cellular Localization	Cytoplasm, Nucleus, Cytoplasm, P-body,
Post-translational Modifications	Ubiquitinated in the presence of HIV-1 VIF, Association with VIF targets the protein for proteolysis by the ubiquitin-dependent proteasome pathway