

For Research Use Only

APOBEC3A Recombinant antibody, PBS Only (Detector)

Catalog Number: 84239-4-PBS



Basic Information

Catalog Number: 84239-4-PBS	GenBank Accession Number: BC126416	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 200315	CloneNo.: 241529G4
Source: Rabbit	UNIPROT ID: P31941	
Isotype: IgG	Full Name: apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3A	
Immunogen Catalog Number: AG18845	Calculated MW: 199 aa, 23 kDa	
	Observed MW: 28 kDa	

Applications

Tested Applications:
WB, IF/ICC, FC (Intra), Cytometric bead array, Indirect ELISA

Species Specificity:
human, rat

Product Information

84239-4-PBS targets APOBEC3A as part of a matched antibody pair:

MP01122-2: 84239-1-PBS capture and 84239-4-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

APOBEC3A, also known as A3A, belongs to the cytidine and deoxycytidylate deaminase family. APOBEC3A plays a role in immunity, by restricting transmission of foreign DNA such as viruses. One mechanism of foreign DNA restriction is deamination of foreign double-stranded DNA cytidines to uridines, which leads to DNA degradation. However, other mechanisms are also thought to be involved, as anti-viral effect is not dependent on deaminase activity. APOBEC3A is expressed in several cell types, including keratinocytes and myeloid cells (PMID: 28825669). APOBEC3A has 2 isoforms with the molecular mass of 22 and 23 kDa.

Storage

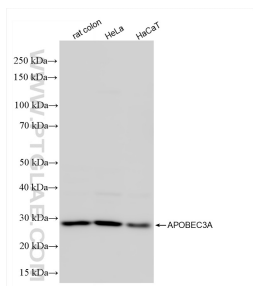
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

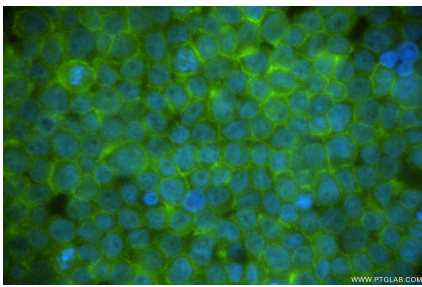
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

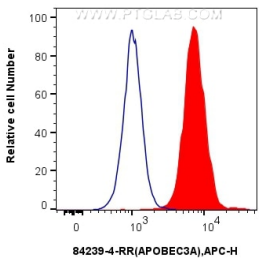
Selected Validation Data



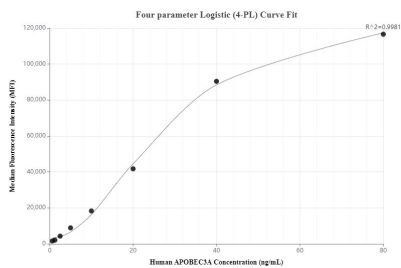
Various lysates were subjected to SDS PAGE followed by western blot with 84239-4-RR (APOBEC3A antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84239-4-PBS in a different storage buffer formulation.



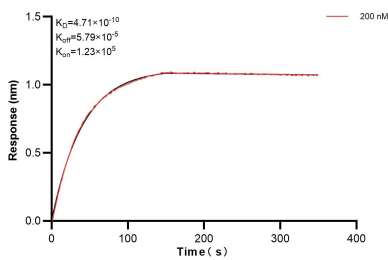
Immunofluorescent analysis of (4% PFA) fixed THP-1 cells using APOBEC3A antibody (84239-4-RR, Clone: 241529G4) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84239-4-PBS in a different storage buffer formulation.



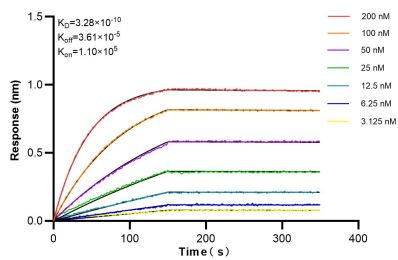
1x10⁶ A431 cells were intracellularly stained with 0.25 ug Apobec3a Recombinant Antibody (84239-4-RR, Clone:241529G4) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 84239-4-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01122-2, APOBEC3A Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84239-1-PBS. Detection antibody: 84239-4-PBS. Standard: Ag18845. Range: 0.625-80 ng/mL.



Bioluminescence resonance energy transfer (BRET) kinetic assay of 84239-4-PBS against Human APOBEC3A was performed. The affinity constant is 0.471 nM.



Bioluminescence resonance energy transfer (BRET) kinetic assays of 84239-4-RR against Human APOBEC3A were performed. The affinity constant is 0.328 nM.