For Research Use Only

## APOBEC3A Recombinant antibody, PBS Only (Detector)

Catalog Number:84239-4-PBS



**Purification Method:** 

CloneNo.:

241529G4

Protein A purification

**Basic Information** 

Catalog Number: GenBank Accession Number:

84239-4-PBS BC126416
Size: GeneID (NCBI):

100ug, Concentration: 1 mg/ml by 200315

Nanodrop; UNIPROT ID:
Source: P31941
Rabbit Full Name:

 Isotype:
 apolipoprotein B mRNA editing

 IgG
 enzyme, catalytic polypeptide-like

Immunogen Catalog Number: 38

AG18845 Calculated MW:

199 aa, 23 kDa Observed MW: 28 kDa

**Applications** 

**Tested Applications:** 

WB, 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.

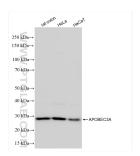
**Background Information** 

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.

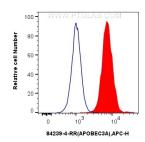
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

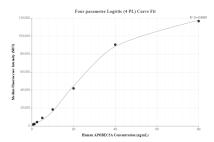
## **Selected Validation Data**



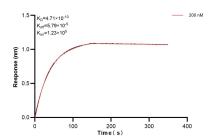
Various lysates were subjected to SDS PAGE followed by western blot with 84239-4-RR (APOBEC 3A antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84239-4-PBS in a different storage buffer formulation



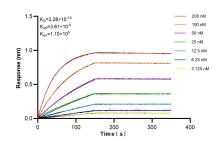
1x10^6 A431 cells were intracellularly stained with 0.25 ug Apobec3a Recombinant Antibody (84239-4-RR, Clone:241529G4) and APC-Conjugated Goat Anti-Rabbit 1gG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data 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



Biolayer interferometry (BLL) kinetic assay of 84239-4-PBS against Human APOBEC3A was performed. The affinity constant is 0.471 nM.



Biolayer interferometry (BLL) kinetic assays of 84239-4-RR against Human APOBEC3A were performed. The affinity constant is 0.328 nM.