For Research Use Only

## ALKBH3 Recombinant monoclonal antibody

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Catalog Number:84314-3-RR

**Basic Information** 

Catalog Number: 84314-3-RR Source:

Rabbit Isotype: IgG

Immunogen Catalog Number:

AG2982

GenBank Accession Number:

BC015155 GeneID (NCBI): 221120 **UNIPROT ID:** Q96Q83

Full Name: alkB, alkylation repair homolog 3 (E.

Calculated MW: 286 aa, 33 kDa

Observed MW: 19-25 kDa

**Tested Applications:** 

human, mouse, rat

**Purification Method:** 

Protein A purfication

CloneNo.: 241650C3

Recommended Dilutions: WB: 1:5000-1:50000 IF/ICC: 1:200-1:800

FC (Intra): 0.25 ug per 10^6 cells in a

100 µl suspension

**Applications** 

WB, IF/ICC, FC (Intra), ELISA

Species Specificity:

Positive Controls:

WB: Jurkat cells, mouse kidney tissue, mouse heart

tissue, rat heart tissue IF/ICC: A431 cells,

FC (Intra): PC-3 cells, HeLa cells

**Background Information** 

ALKBH3, also named as ABH3 and DEPC-1, is a dioxygenase that mediates demethylation of DNA and RNA containing 1-methyladenosine (m1A). It has a strong preference for single-stranded. ALKBH3 is requires molecular oxygen, alpha-ketoglutarate and iron. This gene has some isoforms with MW 19-25 kDa and 33 kDa.

Storage

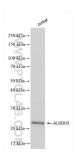
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

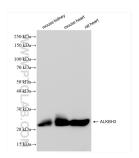
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

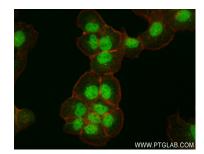
## Selected Validation Data



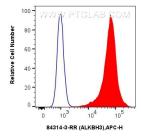
Various lysates were subjected to SDS PAGE followed by western blot with 84314-3-RR (ALKBH3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



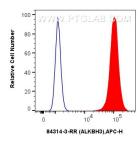
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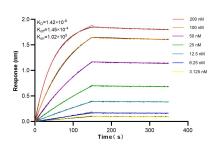
Immunofluorescent analysis of (4% PFA) fixed A431 cells using ALKBH3 antibody (84314-3-RR, Clone: 241650C3) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



1x10^6 HeLa cells were intracellularly stained with 0.25 ug ALKBH3 Recombinant antibody (84314-3-RR, Clone:241650C3) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.



1x10^6 PC-3 cells were intracellularly stained with 0.25 ug ALKBH3 Recombinant antibody (84314-3-RR, Clone:241650C3) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.



Biolayer interferometry (BLI) kinetic assays of 84314-3-RR against Human ALKBH3 were performed. The affinity constant is 1.42 nM.