For Research Use Only

## ALKBH3 Recombinant antibody, PBS Only (Capture)

Catalog Number:84314-2-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

241650F10

**Basic Information** 

Catalog Number: GenBank Accession Number: 84314-2-PBS BC015155

84314-2-PBS BC015155
Size: GeneID (NCBI):
1000 μ g/ml 221120

Source: UNIPROT ID: Rabbit Q96Q83
Isotype: Full Name:

IgG alkB, alkylation repair homolog 3 (E.

Immunogen Catalog Number: Coli

AG2982 Calculated MW:

286 aa, 33 kDa Observed MW: 30-33 kDa

**Applications** 

**Tested Applications:** 

WB, FC (Intra), Cytometric bead array, Sandwich ELISA,

Indirect ELISA, Sample test

Species Specificity:

human, mouse, rat

**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

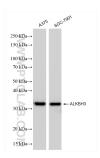
Storage:

Store at -80°C

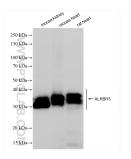
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C  $\,$ 

Storage Buffer: PBS Only

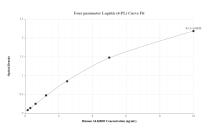
## Selected Validation Data



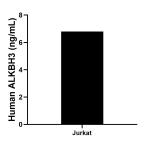
Various lysates were subjected to SDS PAGE followed by western blot with 84314-2-RR (ALKBH3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84314-2-PBS in a different storage buffer formulation.



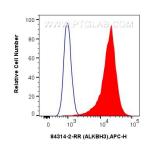
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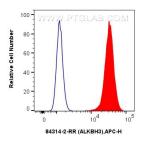
Sandwich ELISA standard curve of MP01211-2, Human ALKBH3 Recombinant Matched Antibody Pair - PBS only. 84314-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag2982. 84314-4-PBS was HRP conjugated as the detection antibody. Range: 0.156-10 ng/mL



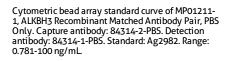
The mean ALKBH3 concentration was determined to be 6.80 ng/mL in Jurkat cell extract based on a 1.50 mg/mL extract load.

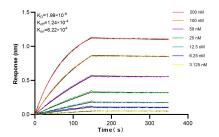


1x10^6 HeLa cells were intracellularly stained with 0.25 ug ALKBH3 Recombinant antibody (84314-2-RR, Clone:241650F10) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 84314-2-PBS in a different storage buffer formulation.



1x10^6 PC-3 cells were intracellularly stained with 0.25 ug ALKBH3 Recombinant antibody (84314-2-RR, Clone:241650F10) 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 (PF00011-C). This data was developed using the same antibody clone with 84314-2-PBS in a different storage buffer formulation.





Biolayer interferometry (BLL) kinetic assays of 84314-2-RR against Human ALKBH3 were performed. The affinity constant is 1.99 nM.