

ALKBH5 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18410c**Specification**

ALKBH5 Antibody (Center) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	Q6P6C2
Other Accession	D3ZKD3 , Q3TSG4 , E1BH29 , NP_060228.3
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	302-330

ALKBH5 Antibody (Center) - Additional Information**Gene ID** 54890**Other Names**RNA demethylase ALKBH5, 11411-, Alkylated DNA repair protein alkB homolog 5,
Alpha-ketoglutarate-dependent dioxygenase alkB homolog 5, ALKBH5, ABH5, OFOXD1**Target/Specificity**

This ALKBH5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 302-330 amino acids from the Central region of human ALKBH5.

DilutionWB~~1:2000
IHC-P~~1:100
FC~~1:25**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ALKBH5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ALKBH5 Antibody (Center) - Protein Information**Name** ALKBH5

Synonyms ABH5, OFOXD1

Function Dioxygenase that demethylates RNA by oxidative demethylation: specifically demethylates N(6)-methyladenosine (m6A) RNA, the most prevalent internal modification of messenger RNA (mRNA) in higher eukaryotes (PubMed:[23177736](#), PubMed:[24489119](#), PubMed:[24616105](#), PubMed:[24778178](#)). Can also demethylate N(6)-methyladenosine in single-stranded DNA (in vitro) (PubMed:[24616105](#)). Requires molecular oxygen, alpha-ketoglutarate and iron (PubMed:[21264265](#), PubMed:[23177736](#), PubMed:[24489119](#), PubMed:[24616105](#), PubMed:[24778178](#)). Demethylation of m6A mRNA affects mRNA processing and export (PubMed:[23177736](#)). Required for the late meiotic and haploid phases of spermatogenesis by mediating m6A demethylation in spermatocytes and round spermatids: m6A demethylation of target transcripts is required for correct splicing and the production of longer 3'-UTR mRNAs in male germ cells (By similarity).

Cellular Location

Nucleus speckle

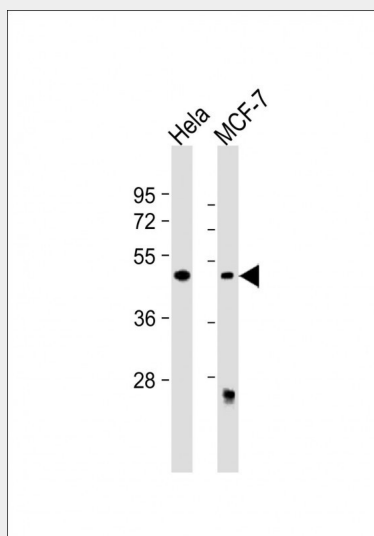
Tissue Location

Widely expressed, with highest expression in lung, followed by testis, pancreas, spleen and ovary

ALKBH5 Antibody (Center) - Protocols

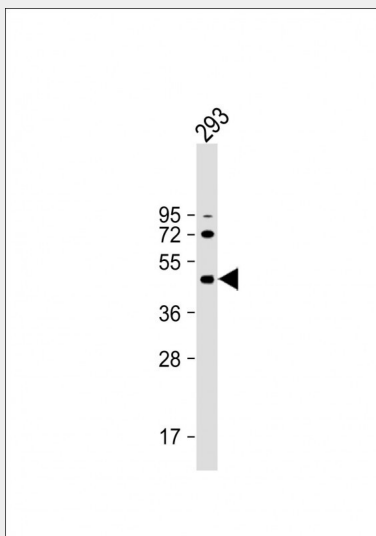
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

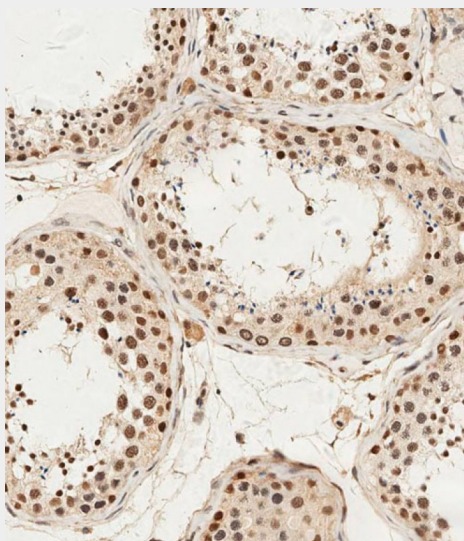
ALKBH5 Antibody (Center) - Images

All lanes : Anti-ALKBH5 Antibody (Center) at 1:500 dilution Lane 1: HeLa whole cell lysate Lane 2: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG,

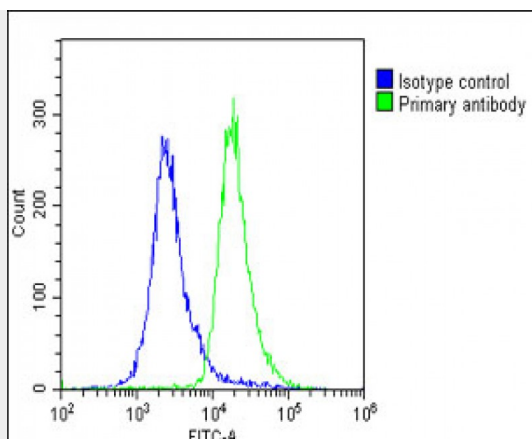
(H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-ALKBH5 Antibody (Center) at 1:2000 dilution + 293 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AP18410c staining ALKBH5 in human testis tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Samples were incubated with primary antibody (1/100) for 1 hours at room temperature. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing U-2 OS cells stained with AP18410c (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP18410c, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

ALKBH5 Antibody (Center) - Background

Probable dioxygenase that requires molecular oxygen, alpha-ketoglutarate and iron (By similarity).

ALKBH5 Antibody (Center) - References

Olsen, J.V., et al. Cell 127(3):635-648(2006)
Bi, W., et al. Genome Res. 12(5):713-728(2002)