

## Anti-ALKBH2 Antibody

Catalog Number: A06325

### Introduction

CD3epsilon is a 20kD chain, which together with CD3lambda, CD3delta, and CD3zeta, and a T cell receptor (alpha/beta or gamma/delta) form the CD3/T-cell receptor complex. It is a specific marker for T lymphocytes, NK T cells, and some thymocytes. Crosslinking of TCR initiates an intracellular signaling cascade resulting in cellular activation and proliferation. The OKT3 antibody has been reported to have potent immunosuppressive properties in vivo and has been proved effective in the treatment of renal, heart, and liver allograft rejection.

This antibody is routinely tested by flow cytometric analysis. Flow cytometry and other applications were tested during antibody development or are reported in the literature.

### Application Information

Each lot of this antibody has been quality control tested by flow cytometric analysis of human PBMCs. For flow cytometric staining, the recommended use of this antibody is  $\leq 0.5\mu\text{g}$  per  $1 \times 10^6$  cells in  $100\mu\text{l}$  of staining volume followed by a secondary fluorescent conjugated anti-mouse antibody. However, it is strongly suggested that the antibody reactivity be empirically titrated for optimal performance in the application of interest.

### About ALKBH2

The E. coli AlkB protein protects against the cytotoxicity of methylating agents by repair of the specific DNA lesions generated in single-stranded DNA; ALKBH2 and ALKBH3 are mammalian homologs of AlkB that catalyze the removal of 1-methyladenine and 3-methylcytosine, modifications that left unchecked could lead to cancerous cells. Mutations in both ALKBH2 and ALKBH3 have been observed in pediatric brain tumors indicating that these proteins are important in the prevention of cancer formation. Like the histone demethylase JMJD1A, ALKBH2 is a non-heme iron enzyme that is inhibited by Nickel ions, suggesting that inhibition of ALKBH2 by Nickel ions may play a role in the development of cancer. Conversely, ALKBH2 mRNA and protein levels are increased glioma cells following Photofrin-mediated photodynamic therapy, an adjuvant therapy in cancer treatment, suggesting that down-regulating ALKBH2 expression in cancer cells may enhance the anti-cancer effectiveness of this treatment.

### Overview

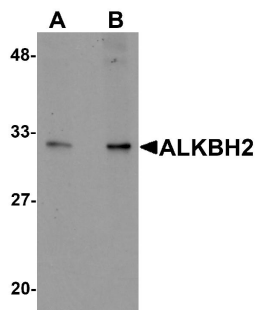
Product Name	Anti-ALKBH2 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-ALKBH2 Antibody (Catalog # A06325). Tested in ELISA, WB, IHC-P applications. This antibody reacts with Human, Mouse, Rat.
Conjugate	Biotin
Application	ELISA, IHC-P, WB
Clonality	Polyclonal SK7
Formulation	ALKBH2 Antibody is supplied in PBS containing 0.02% sodium azide.

Storage Instructions	ALKBH2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. Avoid repeated freeze-thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Host	Rabbit
Uniprot ID	Q6NS38

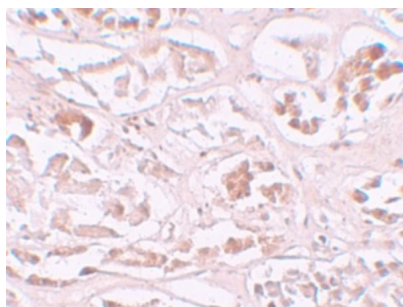
## Technical Details

Immunogen	ALKBH2 antibody was raised against a 15 amino acid synthetic peptide near the carboxy terminus of human ALKBH2. The immunogen is located within amino acids 180 - 230 of ALKBH2.
Predicted Reactive Species	Bovine
Cross Reactivity	ZNF521 antibody is human specific.
Isotype	IgG
Form	Liquid
Concentration	1 mg/mL
Purification	ALKBH2 Antibody is affinity chromatography purified via peptide column.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>ALKBH2 antibody can be used for detection of ALKBH2 by Western blot at 1 - 2 ug/mL. Antibody can also be used for immunohistochemistry starting at 10 ug/mL.</p> <p>Antibody validated: Western Blot in human samples and Immunohistochemistry in human samples.</p> <p>All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.</p>

## Anti-ALKBH2 Antibody (A06325) Images



Western blot analysis of ALKBH2 in human kidney tissue lysate with ALKBH2 antibody at (A) 1 and (B) 2 ug/mL.



Immunohistochemistry of ALKBH2 in human kidney tissue with ALKBH2 antibody at 10 ug/mL.

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