

Datasheet for 600-401-Y05**ALKBH2 Antibody****Overview**

Description:	Anti-ALKBH2 (RABBIT) Antibody - 600-401-Y05
Item No.:	600-401-Y05
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	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.
Synonyms:	ALKBH2 Antibody, ABH2, ABH2, Alpha-ketoglutarate-dependent dioxygenase alkB homolog 2, Alkylated DNA repair protein alkB homolog 2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ALKBH2
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-ALKBH2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the C-terminus of human ALKBH2.
Purity/Specificity:	Anti-ALKBH2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with ALKBH2 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q6NS38 • GeneID - 121642 • NCBI - NP_001138847

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	Anti-ALKBH2 Antibody has been tested for use in ELISA, Western Blotting, and Immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 29 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IHC:	10 µg/mL
WB:	1 - 2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

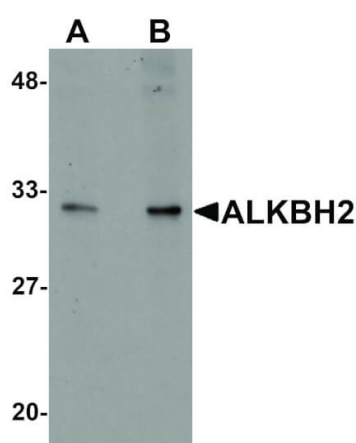
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

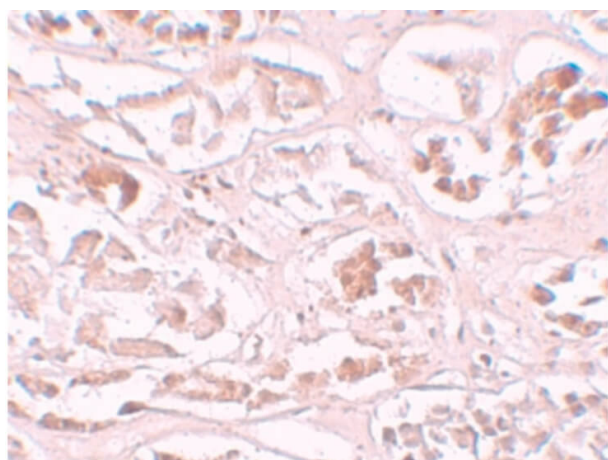
Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of ALKBH2 antibody. Lane 1: Human kidney tissue lysate with ALKBH2 antibody at 1 µg/mL. Lane 2: Human kidney tissue lysate with ALKBH2 antibody at 2 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 29 kDa, 30 kDa for ALKBH2. Other band(s): ALKBH2 splice variants and isoforms.



Immunohistochemistry

Immunohistochemistry of ALKBH2 antibody. Tissue: Human kidney tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ALKBH2 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ALKBH2 is nuclear. Staining: ALKBH2 as precipitated pink signal with brown nuclear counterstain.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.