



Anti-ATDC Ac-K116 (RABBIT) Antibody - 600-401-B16S

Code: 600-401-B16S

Size: 25 µL

Product Description: Anti-ATDC Ac-K116 (RABBIT) Antibody - 600-401-B16S

Concentration: 0.67 mg/mL by UV absorbance at 280 nm

Physical State: Liquid (sterile filtered)

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|-------------------------------|---|
| Label | Unconjugated |
| Host | Rabbit |
| Gene Name | TRIM29 |
| Species Reactivity | human, horse, bovine, chimpanzee, macaque |
| Buffer | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| Stabilizer | None |
| Preservative | 0.01% (w/v) Sodium Azide |
| Storage Condition | Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing. |
| Synonyms | rabbit anti-ATDC Ac-K116 Antibody, rabbit anti-ATDC acetylated Lys116 Antibody, Ataxia-telangiectasia group D associated protein antibody, FLJ36085 antibody, TRIM 29 antibody, Tripartite motif containing protein 29 antibody, TRIM-29 |
| Application Note | This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity and detection of ATDC Ac-K116 should be optimized by the end user. Expect a band approximately ~66 kDa in size corresponding to ATDC Ac-K116 by western blotting in the appropriate cell lysate or extract. |
| Background | Ataxia-telangiectasia group D-associated protein (ATDC), also called tripartite motif-containing protein 29 (TRIM29), is a novel Histone deacetylase (HDAC) associated protein. Its function is tightly regulated by HDAC. ATDC Lysine 116 (K116) is acetylated and has a significant functional role in regulating cell survival and tumorigenesis. ATDC is expressed in placenta, prostate and thymus, and is over expressed in pancreatic and cervical tumors. Its function in tumor cells is not fully understood. It is constitutively phosphorylated by PKC on serine/threonine in A431 cells. The ATDC gene product is one of a group of proteins that share multiple zinc finger motifs and an adjacent leucine zipper motif. These proteins have been proposed to form homo- or heterodimers involved in nucleic acid binding, consistent with the fact that many of these proteins appear to be transcriptional regulatory factors involved in carcinogenesis and/or differentiation. The likelihood that the ATDC gene product is involved in transcriptional regulation could explain the pleiomorphic characteristics of AT, including abnormal cell cycle regulation. |
| Purity And Specificity | This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with over-expressed, acetylated lysine ATDC protein. A BLAST analysis was used to suggest cross-reactivity with ATDC from human, horse, cattle, chimpanzee and macaque based on a 100% homology with the immunizing sequence. Partial reactivity is expected against rat and mouse ATDC based on 92% homology with the immunizing sequence. Cross-reactivity with ATDC from other sources has not been determined. |
| Assay Dilutions | User Optimized |
| ELISA | 1:100,000 |
| Western Blot | 1:500 to 3,000 |
| Other Assays | User Optimized |
| Expiration | Expiration date is three (3) months from date of opening. |
| Immunogen | This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to an internal portion of human ATDC protein around lysine 116. |
| General Reference | Kapp LN, Painter RB, Yu LC, van Loon N, Richard CW 3rd, James MR, Cox DR, Murnane JP. Cloning of a candidate gene for ataxia-telangiectasia group D. Am J Hum Genet. 1992 Jul;51(1):45-54. Brzoska PM, Chen H, Zhu Y, Levin NA, Disatnik MH, Mochly-Rosen D, Murnane JP, Christman MF. The product of the ataxia-telangiectasia group D complementing gene, ATDC, interacts with a protein kinase C substrate and inhibitor. Proc Natl Acad Sci U S A. 1995 Aug 15;92(17):7824-8. Leonhardt EA, Kapp LN, Young BR, Murnane JP. (1994) Nucleotide sequence analysis of a candidate gene for ataxia-telangiectasia group D (ATDC). Genomics. Jan 1;19(1):130-6 |

Specific Reference

Yuan, Zhigang , Peng L, Radhakrishnan R, and Seto E. Histone Deacetylase 9 (HDAC9) Regulates the Functions of the ATDC (TRIM29) Protein. JBC 2010 December 10; 285(50): 39329-38.Zhigang Yuan,Villagra A, Peng L, Coppola D, Glazak M, Sotomayor AM, Chen J, Lane WS, Seto E. The ATDC (TRIM29) Protein Binds p53 and Antagonizes p53-Mediated Functions. Mol. And Cell Bio. 2010 June 30(12):3004-3015.

Related Products

| | |
|-------------|---|
| 200-301-268 | Anti-AKT pS473 (MOUSE) Monoclonal Antibody - 200-301-268 |
| 610-4302 | Anti-MOUSE IgG (H&L) (RABBIT) Antibody Peroxidase Conjugated - 610-4302 |
| 611-1302 | Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302 |
| B304 | NORMAL GOAT SERUM (NGS) - B304 |

Related Links

NCBI - 17402909

<http://www.ncbi.nlm.nih.gov/protein/17402909>

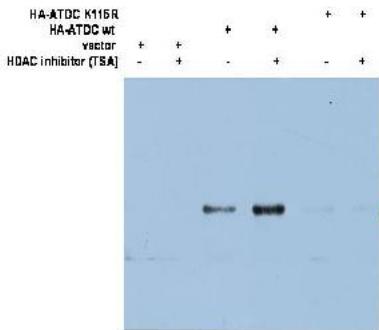
UniProtKB - Q14134 <http://www.uniprot.org/uniprot/Q14134>

GeneID - 23650

Images

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Western blot using Rockland's affinity purified anti-ATDC (Ac-K116) antibody shows detection of a 66 kDa band corresponding to over-expressed, acetylated lysine (K116) ATDC (arrowhead) in transfected 293T cells. No staining is noted for cells transfected with empty vector only. No staining is noted for cells transfected with an ATDC K116R mutant (K to R transversion lacks site for acetylation). In each instance, samples were prepared with and without TSA (1.3uM, 6 hr) which inhibits deacetylation. Personal communication, Z. Yuan, H Lee Moffitt Cancer Center and Research Institute.



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