

**Anti-ATDC Ac-K116 (RABBIT) Antibody**  
**ATDC Ac-K116 Antibody**  
**Catalog # ASR5465****Specification**

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**Anti-ATDC Ac-K116 (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Chimpanzee, Human, Bovine, Horse
Clonality	Polyclonal
Application	WB, E, I, LCI
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.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
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.
Preservative	0.01% (w/v) Sodium Azide

**Anti-ATDC Ac-K116 (RABBIT) Antibody - Additional Information****Gene ID** 23650**Other Names**  
23650**Purity**

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.

**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.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

**Anti-ATDC Ac-K116 (RABBIT) Antibody - Protein Information**

**Name** TRIM29

**Synonyms** ATDC

**Function**

Plays a crucial role in the regulation of macrophage activation in response to viral or bacterial infections within the respiratory tract. Mechanistically, TRIM29 interacts with IKBKG/NEMO in the lysosome where it induces its 'Lys-48' ubiquitination and subsequent degradation. In turn, the expression of type I interferons and the production of pro-inflammatory cytokines are inhibited. Additionally, induces the 'Lys-48' ubiquitination of STING1 in a similar way, leading to its degradation.

**Cellular Location**

Cytoplasm. Lysosome. Note=Colocalizes with intermediate filaments

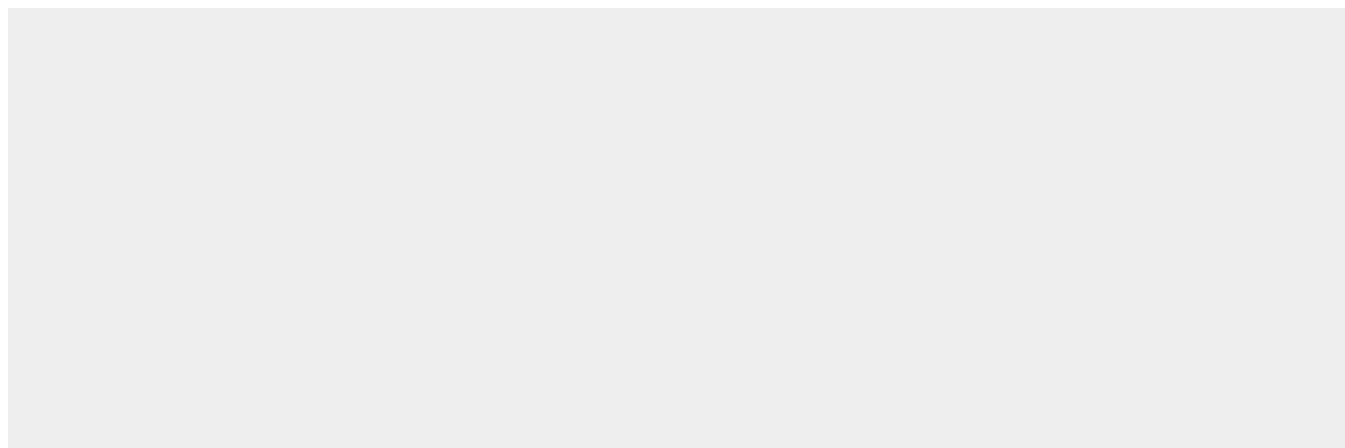
**Tissue Location**

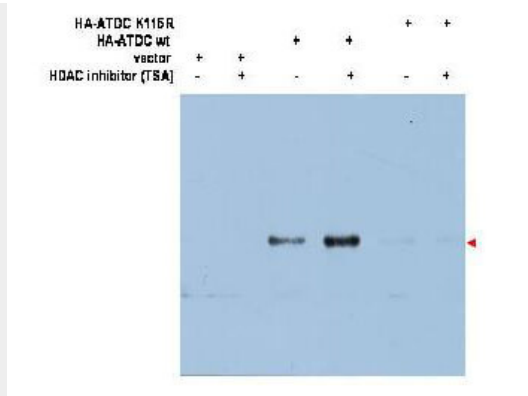
Expressed in placenta, prostate and thymus.

**Anti-ATDC Ac-K116 (RABBIT) Antibody - 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](#)

**Anti-ATDC Ac-K116 (RABBIT) Antibody - Images**



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.

### Anti-ATDC Ac-K116 (RABBIT) Antibody - 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 pleomorphic characteristics of AT, including abnormal cell cycle regulation.