## BACKGROUND

Ataxia-telangiectasia (AT) is an autosomal recessive human genetic disease characterized by an elevated risk of cancer, immune defects, genetic instability and an increased sensitivity to radiation. For example, $10-15 \%$ of AT patients suffer an extremely high incidence of lymphoid malignancies incuding both $T$ and $B$ cell tumors by early adulthood. Interestingly, there is a total absence of myloid tumors in these patients. Although AT homozygotes are rare, the AT gene is likely to play a role in sporadic breast cancer and other common cancers. The human AT gene has been mapped to chromosome 11q23.3. The AT group D complementing gene has been cloned. The protein, designated ATDC, has been shown to interact with the intermediate filament protein vimentin, a substrate for the PKC family of protein kinases, and with hPKCl-1, an inhibitor of the PKCs. Examination of the predicted ATDC amino acid sequence has revealed the presence of both zinc finger and leucine zipper motifs, suggesting that the protein may form homodimers and possibly associate with DNA.

## CHROMOSOMAL LOCATION

Genetic locus: TRIM29 (human) mapping to 11q23.3; Trim29 (mouse) mapping to 9 A5.1.

## SOURCE

ATDC ( $\mathrm{H}-300$ ) is a rabbit polyclonal antibody raised against amino acids 289-588 mapping at the C-terminus of ATDC of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{~g} \operatorname{lgG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

## STORAGE

Store at $4^{\circ} \mathrm{C}_{1}{ }^{* *}$ DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

ATDC (H-300) is recommended for detection of ATDC $\alpha$ and $\beta$ isoforms of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation $[1-2 \mu \mathrm{~g} \mathrm{per} 100-500 \mu \mathrm{~g}$ of total protein ( 1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ATDC ( $\mathrm{H}-300$ ) is also recommended for detection of ATDC $\alpha$ and $\beta$ isoforms in additional species, including equine, canine, bovine and porcine.
Suitable for use as control antibody for ATDC siRNA (h): sc-43625, ATDC siRNA (m): sc-44434, ATDC shRNA Plasmid (h): sc-43625-SH, ATDC shRNA Plasmid (m): sc-44434-SH, ATDC shRNA (h) Lentiviral Particles: sc-43625-V and ATDC shRNA (m) Lentiviral Particles: sc-44434-V.

Molecular Weight of ATDC: 66 kDa .
Positive Controls: ATDC (h): 293T Lysate: sc-112361, HeLa whole cell lysate: sc-2200 or mouse PBL tissue extract.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz MarkerTM compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 ( 0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz ${ }^{\text {TM }}$ Mounting Medium: sc-24941.

## DATA



ATDC (H-300): sc-33151. Western blot analysis of ATDC expression in non-transfected: sc-117752 (A) and human ATDC transfected: sc-112361 (B) 293T whole cell lysates.


ATDC (H-300): sc-33151. Western blot analysis of ATDC expression in mouse PBL tissue extract.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

Try ATDC (C-2): sc-376125 or ATDC (B-2): sc-166707,
our highly recommended monoclonal alternatives to ATDC ( $\mathrm{H}-300$ ).

