SANTA CRUZ BIOTECHNOLOGY, INC.

ARD1 (FL-235): sc-33820



BACKGROUND

The ARD1 subfamily of proteins belongs to the larger acetyltransferase family. N-terminal acetyltransferase complex ARD1, also designated Te2, forms a complex with NARG1, displaying N-terminal acetyltransferase activity. Without NARG1, ARD1 promotes hypoxia-inducible factor-1 α (HIF-1 α) degradation by displaying internal acetyltransferase activity towards HIF-1 α . This ubiquitously expressed protein, which is mainly cytoplasmic, is cleaved by caspases during apoptosis. ARD1 interacts with the ribosome, NARG1 and HIF-1 α . In its binding to HIF-1 α , ARD1 acts as a protein acetyltransferase by regulating its stability. In many cell lines, ARD1 is downregulated in response to hypoxia. ARD1 is expressed throughout the developing brain.

REFERENCES

- 1. Jeong, J.W., et al. 2002. Regulation and destabilization of HIF-1 α by ARD1-mediated acetylation. Cell 111: 709-720.
- 2. Sugiura, N., et al. 2003. An evolutionarily conserved N-terminal acetyltransferase complex associated with neuronal development. J. Biol. Chem. 278: 40113-40120.

CHROMOSOMAL LOCATION

Genetic locus: ARD1A (human) mapping to Xq28; Ard1 (mouse) mapping to X A7.3.

SOURCE

ARD1 (FL-235) is a rabbit polyclonal antibody raised against amino acids 1-235 representing full length ARD1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ARD1 (FL-235) is recommended for detection of N-terminal Acetyltransferase Complex ARD1 Subunit Homolog of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

ARD1 (FL-235) is also recommended for detection of N-terminal Acetyltransferase Complex ARD1 Subunit Homolog in additional species, including equine and feline.

Suitable for use as control antibody for ARD1 siRNA (h): sc-44713, ARD1 siRNA (m): sc-44714, ARD1 shRNA Plasmid (h): sc-44713-SH, ARD1 shRNA Plasmid (m): sc-44714-SH, ARD1 shRNA (h) Lentiviral Particles: sc-44713-V and ARD1 shRNA (m) Lentiviral Particles: sc-44714-V.

Molecular Weight of ARD1: 30 kDa.

Positive Controls: ARD1 (m): 293T Lysate: sc-118513, HeLa whole cell lysate: sc-2200 or HL-60 whole cell lysate: sc-2209.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



ARD1 (FL-235): sc-33820. Western blot analysis of ARD1 expression in non-transfected 2931: sc-11752 (A), mouse ARD1 transfected 2931: sc-118513 (B) and HeLa (C) whole cell lysates.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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 **ARD1 (A-10): sc-373920**, our highly recommended monoclonal alternative to ARD1 (FL-235).