# ARD1 (E-16): sc-33256



The Power to Question

## **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- $1\alpha$  (HIF- $1\alpha$ ) degradation by displaying internal acetyltransferase activity towards HIF- $1\alpha$ . This ubiquitously expressed protein, which is mainly cytoplasmic, is cleaved by caspases during apoptosis. ARD1 interacts with the ribosome, NARG1 and HIF- $1\alpha$ . In its binding to HIF- $1\alpha$ , 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.

## **CHROMOSOMAL LOCATION**

Genetic locus: NAA10 (human) mapping to Xq28; Naa10 (mouse) mapping to X A7.3.

## SOURCE

ARD1 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ARD1 of mouse origin.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-33256 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

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

## **APPLICATIONS**

ARD1 (E-16) 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  $\mu g$  per 100-500  $\mu g$  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).

ARD1 (E-16) is also recommended for detection of N-terminal Acetyltransferase Complex ARD1 Subunit Homolog in additional species, including equine, bovine and porcine.

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.

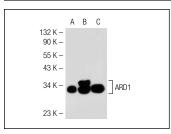
Molecular Weight of ARD1: 30 kDa.

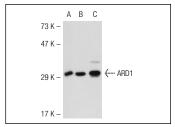
Positive Controls: ARD1 (m): 293T Lysate: sc-118513, HeLa whole cell lysate: sc-2200 or ARD1 (h): 293T Lysate: sc-128004.

#### **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 Marker™ 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™ Mounting Medium: sc-24941.

## **DATA**





ARD1 (E-16): sc-33256. Western blot analysis of ARD1 expression in non-transfected 293T: sc-117752 (A), human ARD1 transfected 293T: sc-128004 (B) and Hel a (C) whole cell lysates

ARD1 (E-16): sc-33256. Western blot analysis of ARD1 expression in non-transfected 293T: sc-117752 (A), mouse ARD1 transfected 293T: sc-118513 (B) and HeLa (C) whole cell lysates.

## **SELECT PRODUCT CITATIONS**

- 1. Kuo, H.P., et al. 2010. ARD1 stabilization of TSC2 suppresses tumorigenesis through the mTOR signaling pathway. Sci. Signal. 3: ra9.
- Pang, A.L., et al. 2011. Expression of human NAA11 (ARD1B) gene is tissue-specific and is regulated by DNA methylation. Epigenetics 6: 1391-1399.

## **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 (E-16).

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