

ARIH1 (C-7): sc-514551

BACKGROUND

ARIH1 (ariadne homolog), also known as ubiquitin conjugating enzyme E2 binding protein 1, ARI, HARI, HHARI (human homolog of *Drosophila* ariadne), MOP-6 (monocyte protein 6) or UBCH7BP (UBCH7 binding protein), is a 557 amino acid cytoplasmic protein. Expressed in a wide variety of tissues, ARIH1 contains two RING-type zinc fingers and one IBR (in-between RING fingers)-type domain. ARIH1 is believed to be involved in protein degradation and protein translation. ARIH1 interacts with UBCH7 and is thought to function as an E3 ubiquitin-protein ligase (or as a component of an E3 complex) that, characteristic of E3 ligase proteins, accepts ubiquitin (in the form of a thioester) from an E2 ubiquitin-conjugating enzyme (UBCH7) and transfers that ubiquitin residue to substrates targeted for degradation. Specifically, ARIH1 interacts with and polyubiquitylates eIF4E2, thereby targeting it for proteasomal degradation.

REFERENCES

- Moynihan, T.P., et al. 1999. The ubiquitin-conjugating enzymes UBCH7 and UBCH8 interact with RING finger/IBR motif-containing domains of HHARI and H7-AP1. *J. Biol. Chem.* 274: 30963-30968.
- Tan, N.G., et al. 2000. Characterisation of the human and mouse orthologues of the *Drosophila* ariadne gene. *Cytogenet. Cell Genet.* 90: 242-245.
- Ardley, H.C., et al. 2001. Features of the parkin/ariadne-like ubiquitin ligase, HHARI, that regulate its interaction with the ubiquitin-conjugating enzyme, UBCH7. *J. Biol. Chem.* 276: 19640-19647.

CHROMOSOMAL LOCATION

Genetic locus: ARIH1 (human) mapping to 15q24.1; Arih1 (mouse) mapping to 9 B.

SOURCE

ARIH1 (C-7) is a mouse monoclonal antibody raised against amino acids 374-557 mapping at the C-terminus of ARIH1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ARIH1 (C-7) is available conjugated to agarose (sc-514551 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514551 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514551 PE), fluorescein (sc-514551 FITC), Alexa Fluor® 488 (sc-514551 AF488), Alexa Fluor® 546 (sc-514551 AF546), Alexa Fluor® 594 (sc-514551 AF594) or Alexa Fluor® 647 (sc-514551 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514551 AF680) or Alexa Fluor® 790 (sc-514551 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

ARIH1 (C-7) is recommended for detection of ARIH1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for ARIH1 siRNA (h): sc-90171, ARIH1 siRNA (m): sc-141232, ARIH1 shRNA Plasmid (h): sc-90171-SH, ARIH1 shRNA Plasmid (m): sc-141232-SH, ARIH1 shRNA (h) Lentiviral Particles: sc-90171-V and ARIH1 shRNA (m) Lentiviral Particles: sc-141232-V.

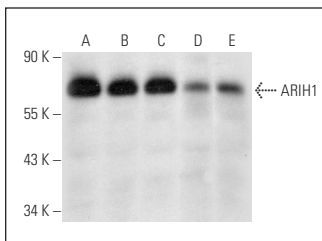
Molecular Weight of ARIH1: 64 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, CCRF-CEM cell lysate: sc-2225 or ALL-SIL whole cell lysate: sc-364356.

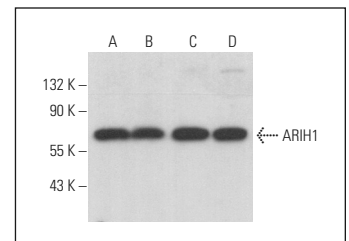
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ARIH1 (C-7): sc-514551. Western blot analysis of ARIH1 expression in ALL-SIL (A), Jurkat (B), CCRF-CEM (C), U-937 (D) and BYDP (E) whole cell lysates.



ARIH1 (C-7): sc-514551. Western blot analysis of ARIH1 expression in Jurkat (A), HEL 92.1.7 (B), MOLT-4 (C) and M1 (D) whole cell lysates.

SELECT PRODUCT CITATIONS

- Ko, T. and Li, S. 2019. Genome-wide screening identifies novel genes and biological processes implicated in cisplatin resistance. *FASEB J.* 33: 7143-7154.
- Wu, Y., et al. 2021. ARIH1 signaling promotes anti-tumor immunity by targeting PD-L1 for proteasomal degradation. *Nat. Commun.* 12: 2346.

RESEARCH USE

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