SANTA CRUZ BIOTECHNOLOGY, INC.

ARIH1 (B-2): sc-390763

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.

CHROMOSOMAL LOCATION

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

SOURCE

ARIH1 (B-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 532-557 of ARIH1 of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390763 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

ARIH1 (B-2) 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), immunohistochemistry (including paraffin-embedded sections) (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.

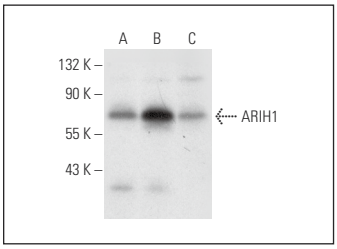
Molecular Weight of ARIH1: 64 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, ALL-SIL whole cell lysate: sc-364356 or BYDP whole cell lysate: sc-364368.

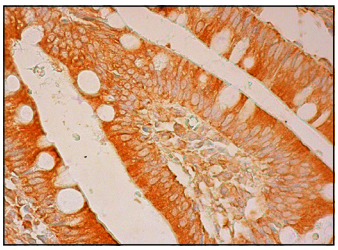
RECOMMENDED SUPPORT REAGENTS

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 L-Agarose: sc-2336 (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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



ARIH1 (B-2): sc-390763. Western blot analysis of ARIH1 expression in CCRF-CEM (**A**), ALL-SIL (**B**) and BYDP (**C**) whole cell lysates.



ARIH1 (B-2): sc-390763. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. van Well, E.M., et al. 2019. A protein quality control pathway regulated by linear ubiquitination. EMBO J. 38: e100730.
2. Jin, J., et al. 2021. Induced TRIM21 ISGylation by IFN-β enhances p62 ubiquitination to prevent its autophagosome targeting. Cell Death Dis. 12: 697.
3. Feng, S., et al. 2023. Inhibition of CARM1-mediated methylation of ACSL4 promotes ferroptosis in colorectal cancer. Adv. Sci. 10: e2303484.

RESEARCH USE

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

PROTOCOLS

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