

# ARIH1 (Q-20): sc-101889

## 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

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2. Tan, N.G., et al. 2000. Characterisation of the human and mouse orthologues of the *Drosophila ariadne* gene. *Cytogenet. Cell Genet.* 90: 242-245.
3. 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.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605624. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Tan, N.G., et al. 2003. Human homologue of ariadne promotes the ubiquitylation of translation initiation factor 4E homologous protein, 4EHP. *FEBS Lett.* 554: 501-504.
6. Capili, A.D., et al. 2004. Structure of the C-terminal RING finger from a RING-IBR-RING/TRIAD motif reveals a novel zinc-binding domain distinct from a RING. *J. Mol. Biol.* 340: 1117-1129.
7. Okui, M., et al. 2005. Transcription factor single-minded 2 (SIM2) is ubiquitinated by the RING-IBR-RING-type E3 ubiquitin ligases. *Exp. Cell Res.* 309: 220-228.

## CHROMOSOMAL LOCATION

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

## SOURCE

ARIH1 (Q-20) is a purified rabbit polyclonal antibody raised against ARIH1 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

ARIH1 (Q-20) is recommended for detection of ARIH1 of mouse, human, canine and zebrafish 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)] 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.

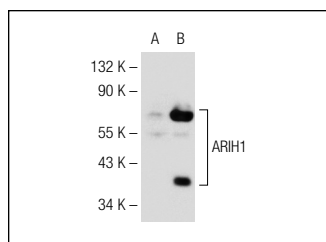
Molecular Weight of ARIH1: 64 kDa.

Positive Controls: ARIH1 (h): 293T Lysate: sc-116302, Jurkat whole cell lysate: sc-2204 or U-937 cell lysate: sc-2239.

## 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).

## DATA



ARIH1 (Q-20): sc-101889. Western blot analysis of ARIH1 expression in non-transfected: sc-117752 (A) and human ARIH1 transfected: sc-116302 (B). 293T whole cell lysates.

## STORAGE

Store at 4° C, \*\*DO 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.


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Try **ARIH1 (G-5): sc-514552** or **ARIH1 (C-7): sc-514551**, our highly recommended monoclonal alternatives to ARIH1 (Q-20).