

TRIAD1 (C-3): sc-390670

BACKGROUND

TRIAD1, also known as ARIH2 (ariadne homolog 2) or ARI2, is a 493 amino acid protein that contains one IBR-type zinc finger and two RING-type zinc fingers and belongs to the ariadne subfamily of RBR proteins. Localized to the nucleus, TRIAD1 interacts with UBE2L3 and is thought to act as an E3 ubiquitin-protein ligase, functioning to accept ubiquitin from E2 ubiquitin-conjugating enzymes and transfer the acquired ubiquitin residue to target substrates. TRIAD1 is subject to post-translational DNA damage-dependent phosphorylation, probably by ATM or ATR. The gene encoding TRIAD1 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

1. van der Reijden, B.A., et al. 1999. TRIADs: a new class of proteins with a novel cysteine-rich signature. *Protein Sci.* 8: 1557-1561.
2. Aguilera, M., et al. 2000. Ariadne-1: a vital *Drosophila* gene is required in development and defines a new conserved family of RING-finger proteins. *Genetics* 155: 1231-1244.
3. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 605615. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Beitel, L.K., et al. 2002. Cloning and characterization of an androgen receptor N-terminal-interacting protein with ubiquitin-protein ligase activity. *J. Mol. Endocrinol.* 29: 41-60.
5. Marteijn, J.A., et al. 2005. The E3 ubiquitin-protein ligase TRIAD1 inhibits clonogenic growth of primary myeloid progenitor cells. *Blood* 106: 4114-4123.
6. Marteijn, J.A., et al. 2007. Gfi1 ubiquitination and proteasomal degradation is inhibited by the ubiquitin ligase TRIAD1. *Blood* 110: 3128-3135.
7. Matsuo, S., et al. 2007. ATM and ATR substrate analysis reveals extensive protein networks responsive to DNA damage. *Science* 316: 1160-1166.

CHROMOSOMAL LOCATION

Genetic locus: ARIH2 (human) mapping to 3p21.31; Arih2 (mouse) mapping to 9 F2.

SOURCE

TRIAD1 (C-3) is a mouse monoclonal antibody raised against amino acids 314-481 mapping near the C-terminus of TRIAD1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

TRIAD1 (C-3) is recommended for detection of TRIAD1 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).

TRIAD1 (C-3) is also recommended for detection of TRIAD1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TRIAD1 siRNA (h): sc-63159, TRIAD1 siRNA (m): sc-63160, TRIAD1 shRNA Plasmid (h): sc-63159-SH, TRIAD1 shRNA Plasmid (m): sc-63160-SH, TRIAD1 shRNA (h) Lentiviral Particles: sc-63159-V and TRIAD1 shRNA (m) Lentiviral Particles: sc-63160-V.

Molecular Weight of TRIAD1: 58 kDa.

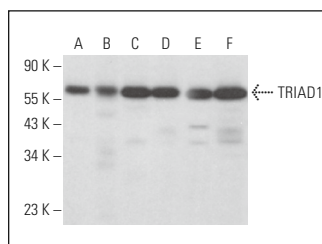
Positive Controls: Jurkat whole cell lysate: sc-2204, PC-12 cell lysate: sc-2250 or A-673 cell lysate: sc-2414.

RECOMMENDED SUPPORT REAGENTS

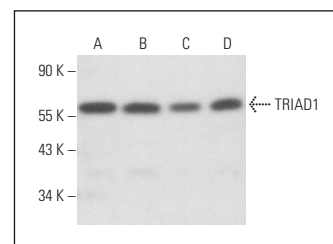
To ensure optimal results, the following support reagents are recommended:

- 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



TRIAD1 (C-3): sc-390670. Western blot analysis of TRIAD1 expression in Jurkat (A), Ramos (B), HEK293T (C), U266 (D), F9 (E) and NCI-H929 (F) whole cell lysates.



TRIAD1 (C-3): sc-390670. Western blot analysis of TRIAD1 expression in Jurkat (A), PC-12 (B), C2C12 (C) and A-673 (D) whole cell lysates.

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.