TRIM23 (8H9): sc-135587



The Power to Ouestion

BACKGROUND

The tripartite motif (TRIM) family of proteins are characterized by a conserved TRIM domain that includes a coiled-coil region, a B-box type zinc finger, one RING finger and three zinc-binding domains. TRIM23 (tripartite motif-containing protein 23), also known as ARD1, ARFD1 or RNF46, is a 574 amino acid intracytoplasmic membrane protein that associates with the Golgi apparatus and with lysosomal structures. Belonging to both the TRIM protein family and the ADP ribosylation factor family of guanine nucleotide-binding proteins, TRIM23 plays a role in the formation of intracellular transport vesicles and aids in the movement of vesicles from one compartment to another. Additionally, TRIM23 interacts with cytohesin-1, an association that is thought to activate TRIM23 function. Three isoforms of TRIM23, designated $\alpha,\,\beta$ and $\gamma,$ are expressed due to alternative splicing events.

REFERENCES

- Mishima, K., Tsuchiya, M., Nightingale, M.S., Moss, J. and Vaughan, M. 1993. ARD 1, a 64 kDa guanine nucleotide-binding protein with a carboxylterminal ADP-ribosylation factor domain. J. Biol. Chem. 268: 8801-8807.
- Vitale, N., Horiba, K., Ferrans, V.J., Moss, J. and Vaughan, M. 1998. Localization of ADP-ribosylation factor domain protein 1 (ARD1) in lysosomes and Golgi apparatus. Proc. Natl. Acad. Sci. USA 95: 8613-8618.
- Vitale, N., Pacheco-Rodriguez, G., Ferrans, V.J., Riemenschneider, W., Moss, J. and Vaughan, M. 2000. Specific functional interaction of human cytohesin-1 and ADP-ribosylation factor domain protein (ARD1). J. Biol. Chem. 275: 21331-21339.
- Simard, M.J. and Chabot, B. 2000. Control of hnRNP A1 alternative splicing: an intron element represses use of the common 3' splice site. Mol. Cell. Biol. 20: 7353-7362.
- Online Mendelian Inheritance in Man, OMIMTM. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 601747. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 6. Vichi, A., Moss, J. and Vaughan, M. 2005. ADP-ribosylation factor domain protein 1 (ARD1), a multifunctional protein with ubiquitin E3 ligase, GAP, and ARF domains. Methods Enzymol. 404: 195-206.
- Vichi, A., Payne, D.M., Pacheco-Rodriguez, G., Moss, J. and Vaughan, M. 2005. E3 ubiquitin ligase activity of the trifunctional ARD1 (ADP-ribosylation factor domain protein 1). Proc. Natl. Acad. Sci. USA 102: 1945-1950.

CHROMOSOMAL LOCATION

Genetic locus: TRIM23 (human) mapping to 5q12.3.

SOURCE

TRIM23 (8H9) is a mouse monoclonal antibody raised against recombinant TRIM23 protein of human origin.

PRODUCT

Each vial contains 100 μg lgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

TRIM23 (8H9) is recommended for detection of TRIM23 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 TRIM23 siRNA (h): sc-106640, TRIM23 shRNA Plasmid (h): sc-106640-SH and TRIM23 shRNA (h) Lentiviral Particles: sc-106640-V.

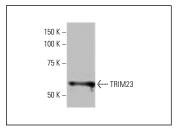
Molecular Weight of TRIM23: 64 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, A-431 whole cell lysate: sc-2201 or Caki-1 cell lysate: sc-2224.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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).

DATA



TRIM23 (8H9): sc-135587. Western blot analysis of TRIM23 expression in A-431 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Liu, X., Matrenec, R., Gack, M.U. and He, B. 2019. Disassembly of the TRIM23-TBK1 complex by the Us11 protein of herpes simplex virus 1 impairs autophagy. J. Virol. 93: e00497-19.

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.

PROTOCOLS

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