

MARVELD3 (T-13): sc-132343

BACKGROUND

MARVELD3 (MARVEL domain-containing protein 3), also known as MRVLDC3 or MARVD3, is a 401 amino acid multi-pass membrane protein that contains one MARVEL (MAL and related proteins for vesicle trafficking and membrane link) domain. The MARVEL domain, which is common in Occludin proteins, is a 130 amino acid motif that contains 4 transmembrane helices, both of which have cytoplasmic N- and C-terminal regions. MARVEL domain-containing proteins are thought to participate in tight junction regulation, the biogenesis of vesicular transport carriers and in cholesterol-rich membrane apposition events. Via its MARVEL domain, MARVELD3 may be involved in developmental and regulatory events throughout the cell. Two isoforms of MARVELD3 exist due to alternative splicing events.

REFERENCES

1. Sánchez-Pulido, L., Martín-Belmonte, F., Valencia, A. and Alonso, M.A. 2002. MARVEL: a conserved domain involved in membrane apposition events. *Trends Biochem. Sci.* 27: 599-601.
2. Brandenberger, R., Wei, H., Zhang, S., Lei, S., Murage, J., Fisk, G.J., Li, Y., Xu, C., Fang, R., Guegler, K., Rao, M.S., Mandalam, R., Lebkowski, J. and Stanton, L.W. 2004. Transcriptome characterization elucidates signaling networks that control human ES cell growth and differentiation. *Nat. Biotechnol.* 22: 707-716.
3. Oh, J.H., Yang, J.O., Hahn, Y., Kim, M.R., Byun, S.S., Jeon, Y.J., Kim, J.M., Song, K.S., Noh, S.M., Kim, S., Yoo, H.S., Kim, Y.S. and Kim, N.S. 2005. Transcriptome analysis of human gastric cancer. *Mamm. Genome* 16: 942-954.
4. Riazuddin, S., Ahmed, Z.M., Fanning, A.S., Lagziel, A., Kitajiri, S., Ramzan, K., Khan, S.N., Chattaraj, P., Friedman, P.L., Anderson, J.M., Belyantseva, I.A., Forge, A., Riazuddin, S. and Friedman, T.B. 2006. Tricellulin is a tight-junction protein necessary for hearing. *Am. J. Hum. Genet.* 79: 1040-1051.

CHROMOSOMAL LOCATION

Genetic locus: Marveld3 (mouse) mapping to 8 D3.

SOURCE

MARVELD3 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal cytoplasmic domain of MARVELD3 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132343 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

MARVELD3 (T-13) is recommended for detection of MARVELD3 isoforms 1 and 2 of mouse 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)], 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); non cross-reactive with MARVELD1.

Suitable for use as control antibody for MARVELD3 siRNA (m): sc-149278, MARVELD3 shRNA Plasmid (m): sc-149278-SH and MARVELD3 shRNA (m) Lentiviral Particles: sc-149278-V.

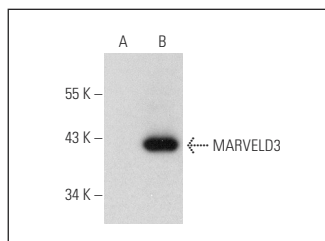
Molecular Weight of MARVELD3: 45 kDa.

Positive Controls: MARVELD3 (m): 293T Lysate: sc-121520, F9 cell lysate: sc-2245 or NIH/3T3 whole cell lysate: sc-2210.

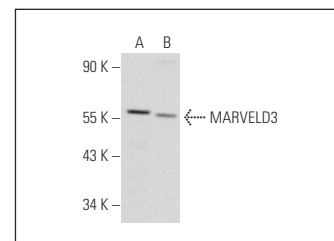
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MARVELD3 (T-13): sc-132343. Western blot analysis of MARVELD3 expression in non-transfected: sc-117752 (A) and mouse MARVELD3 transfected: sc-121520 (B) 293T whole cell lysates.



MARVELD3 (T-13): sc-132343. Western blot analysis of MARVELD3 expression in NIH/3T3 (A) and F9 (B) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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