

MARVELD3 (P-17): sc-102018

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 four 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 (human) mapping to 16q22.3; MarvelD3 (mouse) mapping to 8 D3.

SOURCE

MARVELD3 (P-17) is a purified rabbit polyclonal antibody raised against MARVELD3 of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

MARVELD3 (P-17) is recommended for detection of MARVELD3 of mouse, human and dog 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), 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 MARVELD3 siRNA (h): sc-93402, MARVELD3 siRNA (m): sc-149278, MARVELD3 shRNA Plasmid (h): sc-93402-SH, MARVELD3 shRNA Plasmid (m): sc-149278-SH, MARVELD3 shRNA (h) Lentiviral Particles: sc-93402-V and MARVELD3 shRNA (m) Lentiviral Particles: sc-149278-V.

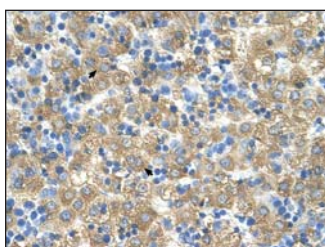
Molecular Weight of MARVELD3: 45 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

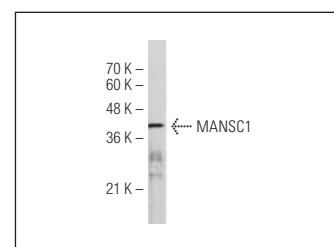
RECOMMENDED SECONDARY REAGENTS

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



MARVELD3 (P-17): sc-102018. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining.



MARVELD3 (P-17): sc-102018. Western blot analysis of MARVELD3 expression in Jurkat whole cell lysate.

RESEARCH USE

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