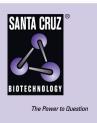
SANTA CRUZ BIOTECHNOLOGY, INC.

MARCH11 (L-18): sc-247945



BACKGROUND

Ubiquitination is an important mechanism through which three classes of enzymes act in concert to target short-lived or abnormal proteins for destruction. The three classes of enzymes involved in ubiquitination are the ubiquitinactivating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). MARCH11 (membrane-associated RING finger protein 11) is a 402 amino acid multi-pass membrane protein of the cytoplasmic vesicle that functions as an E3 ubiquitin-protein ligase, which mediates polyubiquitination of CD4. Existing as two alternatively spliced isoforms, MARCH11 contains one RING-CH-type zinc finger and interacts with AP-1 μ 1, Veli1 and fucose glycoproteins. The gene encoding MARCH11 maps to human chromosome 5p15.1.

REFERENCES

- Ciechanover, A. and Schwartz, A.L. 1994. The ubiquitin-mediated proteolytic pathway: mechanisms of recognition of the proteolytic substrate and involvement in the degradation of native cellular proteins. FASEB J. 8: 182-191.
- Hochstrasser, M. 1995. Ubiquitin, proteasomes, and the regulation of intracellular protein degradation. Curr. Opin. Cell Biol. 7: 215-223.
- 3. Liakopoulos, D., Doenges, G., Matuschewski, K. and Jentsch, S. 1998. A novel protein modification pathway related to the ubiquitin system. EMBO J. 17: 2208-2214.
- Bartee, E., Mansouri, M., Hovey Nerenberg, B.T., Gouveia, K. and Früh, K. 2004. Downregulation of major histocompatibility complex class I by human ubiquitin ligases related to viral immune evasion proteins. J. Virol. 78: 1109-1120.
- Ohmura-Hoshino, M., Goto, E., Matsuki, Y., Aoki, M., Mito, M., Uematsu, M., Hotta, H. and Ishido, S. 2006. A novel family of membrane-bound E3 ubiquitin ligases. J. Biochem. 140: 147-154.
- Morokuma, Y., Nakamura, N., Kato, A., Notoya, M., Yamamoto, Y., Sakai, Y., Fukuda, H., Yamashina, S., Hirata, Y. and Hirose, S. 2007. MARCH-XI, a novel transmembrane ubiquitin ligase implicated in ubiquitin-dependent protein sorting in developing spermatids. J. Biol. Chem. 282: 24806-24815.
- 7. Ishido, S., Goto, E., Matsuki, Y. and Ohmura-Hoshino, M. 2009. E3 ubiquitin ligases for MHC molecules. Curr. Opin. Immunol. 21: 78-83.
- 8. Online Mendelian Inheritance in Man, OMIM™. 2010. Johns Hopkins University, Baltimore, MD. MIM Number: 613338. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: MARCH11 (human) mapping to 5p15.1; March11 (mouse) mapping to 15 B1.

SOURCE

MARCH11 (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MARCH11 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-247945 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MARCH11 (L-18) is recommended for detection of MARCH11 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 other MARCH family members.

MARCH11 (L-18) is also recommended for detection of MARCH11 in additional species, including canine, bovine and avian.

Suitable for use as control antibody for MARCH11 siRNA (m): sc-149265, MARCH11 shRNA Plasmid (m): sc-149265-SH and MARCH11 shRNA (m) Lentiviral Particles: sc-149265-V.

Molecular Weight of MARCH11 isoforms: 44/18 kDa.

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) Immunofluo-rescence: 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.

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 or our catalog for detailed protocols and support products.