

MARCH6 (1A5): sc-517051

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 ubiquitin-activating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). MARCH6 (membrane-associated ring finger (C3HC4) 6), also known as RNF176 or TEB4, is a 910 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and contains one RING-CH-type zinc finger. Expressed in brain tissue, MARCH6 functions as an E3 ubiquitin-protein ligase that accepts a ubiquitin residue from an E2 ubiquitin-conjugating enzyme and transfers that ubiquitin residue to target proteins. MARCH6 exists as multiple alternative spliced isoforms and is subject to auto-ubiquitination, an event which results in its proteasomal degradation.

REFERENCES

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4. Liakopoulos, D., et al. 1998. A novel protein modification pathway related to the ubiquitin system. *EMBO J.* 17: 2208-2214.
5. Swanson, R., et al. 2001. A conserved ubiquitin ligase of the nuclear envelope/endoplasmic reticulum that functions in both ER-associated and Mat α 2 repressor degradation. *Genes Dev.* 15: 2660-2674.
6. Bartee, E., et al. 2004. Downregulation of major histocompatibility complex class I by human ubiquitin ligases related to viral immune evasion proteins. *J. Virol.* 78: 1109-1120.
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CHROMOSOMAL LOCATION

Genetic locus: MARCH6 (human) mapping to 5p15.2; March6 (mouse) mapping to 15 B2.

SOURCE

MARCH6 (1A5) is a mouse monoclonal antibody raised against amino acids 2-91 representing partial length MARCH6 of human origin.

PRODUCT

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

APPLICATIONS

MARCH6 (1A5) is recommended for detection of MARCH6 of mouse, rat and 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).

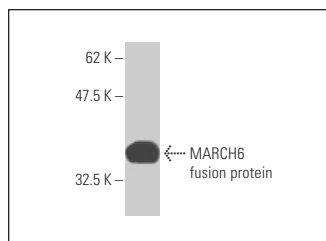
Suitable for use as control antibody for MARCH6 siRNA (h): sc-91789, MARCH6 siRNA (m): sc-149270, MARCH6 shRNA Plasmid (h): sc-91789-SH, MARCH6 shRNA Plasmid (m): sc-149270-SH, MARCH6 shRNA (h) Lentiviral Particles: sc-91789-V and MARCH6 shRNA (m) Lentiviral Particles: sc-149270-V.

Molecular Weight of MARCH6: 103 kDa.

RECOMMENDED SUPPORT REAGENTS

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

DATA



MARCH6 (1A5): sc-517051. Western blot analysis of human recombinant MARCH6 fusion protein.

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.