

MARCH2 (T-12): sc-131182

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). MARCH2 (membrane-associated RING finger (C3HC4) 2), also known as RNF172 or HSPC240, is a 246 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and contains one RING-CH-type zinc finger. Expressed in a variety of tissues, MARCH2 functions as an E3 ubiquitin-protein ligase that is thought to mediate the ubiquitination and subsequent degradation of CD71 and B7-2 and may be involved in endosomal protein trafficking.

REFERENCES

1. Zhang, Q.H., et al. 2000. Cloning and functional analysis of cDNAs with open reading frames for 300 previously undefined genes expressed in CD34⁺ hematopoietic stem/progenitor cells. *Genome Res.* 10: 1546-1560.
2. Barteel, 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.
3. Nakamura, N., et al. 2005. MARCH2 is a syntaxin 6-binding protein involved in endosomal trafficking. *Mol. Biol. Cell* 16: 1696-1710.
4. Nakamura, N., et al. 2006. MARCH5 is a novel mitofusin 2- and DRP1-binding protein able to change mitochondrial morphology. *EMBO Rep.* 7: 1019-1022.
5. Fukuda, H., et al. 2006. MARCH3 is a novel component of endosomes with properties similar to those of MARCH2. *J. Biochem.* 139: 137-145.
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CHROMOSOMAL LOCATION

Genetic locus: MARCH2 (human) mapping to 19p13.2; March2 (mouse) mapping to 17 B1.

SOURCE

MARCH2 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MARCH2 of human 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-131182 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

MARCH2 (T-12) is recommended for detection of MARCH2 of mouse, rat and human 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 other MARCH family members.

Suitable for use as control antibody for MARCH2 siRNA (h): sc-97543, MARCH2 siRNA (m): sc-149266, MARCH2 shRNA Plasmid (h): sc-97543-SH, MARCH2 shRNA Plasmid (m): sc-149266-SH, MARCH2 shRNA (h) Lentiviral Particles: sc-97543-V and MARCH2 shRNA (m) Lentiviral Particles: sc-149266-V.

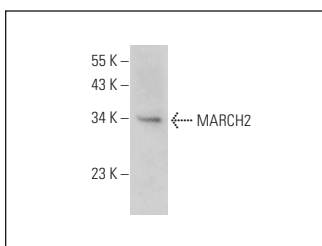
Molecular Weight of MARCH2: 27 kDa.

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 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



MARCH2 (T-12): sc-131182. Western blot analysis of MARCH2 expression in Jurkat whole cell lysate.

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.