MARCH10 (Q-14): sc-107711

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BIOTECHNOLOGY

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BACKGROUND

The RING-type zinc finger motif is present in a number of viral and eukaryotic proteins and is made of a conserved cysteine-rich domain that is able to bind two zinc atoms. Proteins that contain this conserved domain are generally involved in the ubiquitination pathway of protein degradation. MARCH10 (membrane-associated RING finger (C3HC4) 10), also known as RNF190 (RING finger protein 190) or MARCH-X, is a 808 amino acid protein with one RING-CH-type zinc finger domain. MARCH10 may function as an E3 ubiquitin-protein ligase that accepts a ubiquitin residue from an E2 ubiquitin-conjugating enzyme and immediately transfers that residue to a protein that is targeted for degradation.

REFERENCES

1. Morokuma, Y., et al. 2007. MARCH-XI, a novel transmembrane ubiquitin ligase implicated in ubiquitin-dependent protein sorting in developing spermatids. J. Biol. Chem. 282: 24806-24815.

2. Thibodeau, J., et al. 2008. Interleukin-10-induced MARCH1 mediates intracellular sequestration of MHC class II in monocytes. Eur. J. Immunol. 38: 1225-1230.

3. De Gassart, A., et al. 2008. MHC class II stabilization at the surface of human dendritic cells is the result of maturation-dependent MARCH I down-regulation. Proc. Natl. Acad. Sci. USA 105: 3491-3496.

4. Gauci, S., et al. 2009. Lys-N and trypsin cover complementary parts of the phosphoproteome in a refined SCX-based approach. Anal. Chem. 81: 4493-4501.

5. Nathan, J.A. and Lehner, P.J. 2009. The trafficking and regulation of membrane receptors by the RING-CH ubiquitin E3 ligases. Exp. Cell Res. 315: 1593-1600.

CHROMOSOMAL LOCATION

Genetic locus: MARCH10 (human) mapping to 17q23.2.

SOURCE

MARCH10 (Q-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MARCH10 of human origin.

STORAGE

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

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-107711 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

MARCH10 (Q-14) is recommended for detection of MARCH10 of human and rat 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).

MARCH10 (Q-14) is also recommended for detection of MARCH10 in additional species, including equine and canine.

Suitable for use as control antibody for MARCH10 siRNA (h): sc-93921, MARCH10 shRNA Plasmid (h): sc-93921-SH and MARCH10 shRNA (h) Lentiviral Particles: sc-93921-V.
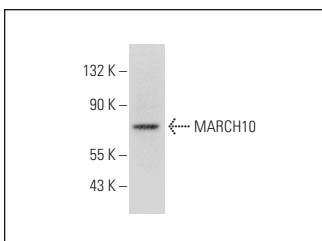
Molecular Weight of MARCH10: 90 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or rat testis extract: sc-2400.

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) Immunoprecip-itation: 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

MARCH10 (Q-14): sc-107711. Western blot analysis of MARCH10 expression in rat testis tissue extract.

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.