

MYSM1 (P-14): sc-161895

BACKGROUND

MYSM1 (Myb-like, SWIRM and MPN domains 1), also known as 2ADUB or KIAA1915, is an 828 amino acid nuclear protein that contains one SWIRM domain, one SANT domain and one MPN domain and exists as multiple alternatively spliced isoforms. Expressed ubiquitously with highest expression in kidney, brain and spleen, MYSM1 functions to bind double-stranded DNA and may positively regulate the transcriptional activity of AR (androgen receptor), possibly via control of histone acetylation and deubiquitination. The gene encoding MYSM1 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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- Weise, A., et al. 2005. New insights into the evolution of chromosome 1. *Cytogenet. Genome Res.* 108: 217-222.
- Qian, C., et al. 2005. Structure and chromosomal DNA binding of the SWIRM domain. *Nat. Struct. Mol. Biol.* 12: 1078-1085.
- Marzin, Y., et al. 2006. Chromosome 1 abnormalities in multiple myeloma. *Anticancer Res.* 26: 953-959.
- Da, G., et al. 2006. Structure and function of the SWIRM domain, a conserved protein module found in chromatin regulatory complexes. *Proc. Natl. Acad. Sci. USA* 103: 2057-2062.
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CHROMOSOMAL LOCATION

Genetic locus: MYSM1 (human) mapping to 1p32.1; Mysm1 (mouse) mapping to 4 C5.

SOURCE

MYSM1 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MYSM1 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-161895 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MYSM1 (P-14) is recommended for detection of MYSM1 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).

MYSM1 (P-14) is also recommended for detection of MYSM1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MYSM1 siRNA (h): sc-78930, MYSM1 siRNA (m): sc-149768, MYSM1 shRNA Plasmid (h): sc-78930-SH, MYSM1 shRNA Plasmid (m): sc-149768-SH, MYSM1 shRNA (h) Lentiviral Particles: sc-78930-V and MYSM1 shRNA (m) Lentiviral Particles: sc-149768-V.

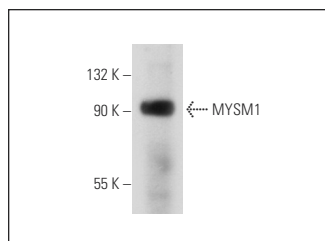
Molecular Weight of MYSM1: 95 kDa.

Positive Controls: rat brain extract: sc-2392.

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



MYSM1 (P-14): sc-161895. Western blot analysis of MYSM1 expression in rat brain tissue extract.

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.