

# MANSC1 (D-4): sc-514113

## BACKGROUND

MANSC1 (MANSC domain-containing protein 1), also known as LOH12CR3 (loss of heterozygosity 12 chromosomal region 3 protein), is a 414 amino acid single-pass membrane protein. Expressed throughout the body, MANSC1 contains one MANSC domain and is encoded by a gene that is located on chromosome 12. Encoding over 1,100 genes within 132 million bases, chromosome 12 makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12, including hypochondrogenesis, achondrogenesis and Kniest dysplasia. Chromosome 12 is also home to a homeobox gene cluster which encodes crucial transcription factors for morphogenesis, and the natural killer complex gene cluster encoding C-type lectin proteins which mediate the NK cell response to MHC I interaction.

## REFERENCES

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- Segel, R., et al. 2006. The natural history of trisomy 12p. *Am. J. Med. Genet. A* 140A: 695-703.
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## CHROMOSOMAL LOCATION

Genetic locus: MANSC1 (human) mapping to 12p13.2; Mansc1 (mouse) mapping to 6 G1.

## SOURCE

MANSC1 (D-4) is a mouse monoclonal antibody raised against amino acids 1-140 mapping at the N-terminus of MANSC1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

MANSC1 (D-4) is recommended for detection of MANSC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for MANSC1 siRNA (h): sc-95962, MANSC1 siRNA (m): sc-149250, MANSC1 shRNA Plasmid (h): sc-95962-SH, MANSC1 shRNA Plasmid (m): sc-149250-SH, MANSC1 shRNA (h) Lentiviral Particles: sc-95962-V and MANSC1 shRNA (m) Lentiviral Particles: sc-149250-V.

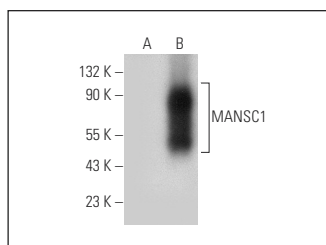
Molecular Weight of MANSC1: 47 kDa.

Positive Controls: MANSC1 (m): 293T Lysate: sc-121502.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



MANSC1 (D-4): sc-514113. Western blot analysis of MANSC1 expression in non-transfected: sc-117752 (A) and mouse MANSC1 transfected: sc-121502 (B) 293T whole cell lysates.

## 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](http://www.scbt.com) for detailed protocols and support products.