# MANSC1 (Y-24): sc-102017



The Power to Question

#### **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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- 3. Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. Immunol. Rev. 181: 20-38.
- 4. Zumkeller, W., et al. 2004. Genotype/phenotype analysis in a patient with pure and complete trisomy 12p. Am. J. Med. Genet. A 129A: 261-264.
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- Kelley, J., et al. 2005. Comparative genomics of natural killer cell receptor gene clusters. PLoS Genet. 1: e27.
- Nishimura, G., et al. 2005. The phenotypic spectrum of COL2A1 mutations. Hum. Mutat. 26: 36-43.

## CHROMOSOMAL LOCATION

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

#### **SOURCE**

MANSC1 (Y-24) is a purified rabbit polyclonal antibody raised against MANSC1 of human origin.

#### **PRODUCT**

Each vial contains 50  $\mu g$  IgG in 500  $\mu l$  PBS with <0.1% sodium azide, 0.1% gelatin and <0.02% sucrose.

#### **STORAGE**

Store at  $4^{\circ}$  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.

#### **APPLICATIONS**

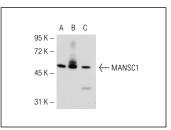
MANSC1 (Y-24) is recommended for detection of MANSC1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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.

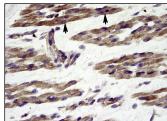
Molecular Weight of MANSC1: 47 kDa.

Positive Controls: MANSC1 (m): 293T Lysate: 121502 or Caki-1 cell lysate: sc-2224.

#### DATA



MANSC1 (Y-24): sc-102017. Western blot analysis of MANSC1 expression in non-transfected 293T: sc-117752 (A), mouse MANSC1 transfected 293T: sc-121502 (B) and Caki-1 (C) whole cell lysates.



MANSC1 (Y-24): sc-102017. Immunoperoxidase staining of formalin fixed, paraffin-embedded human muscle tissue showing cytoplasmic staining.

# **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **MANSC1 (D-4): sc-514113**, our highly recommended monoclonal alternative to MANSC1 (Y-24).

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