10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MSTN Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1925a

Specification

MSTN Antibody - Product Information

Application	**E, WB, FC, IHC**
Primary Accession	O14793
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2b**
Calculated MW	**42.8kDa KDa**

Description
The protein encoded by this gene is a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily. This group of proteins is characterized by a polybasic proteolytic processing site which is cleaved to produce a mature protein containing seven conserved cysteine residues. The members of this family are regulators of cell growth and differentiation in both embryonic and adult tissues. This gene is thought to encode a secreted protein which negatively regulates skeletal muscle growth.

Immunogen
Purified recombinant fragment of human MSTN (AA:24-266) expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide.

MSTN Antibody - Additional Information

Gene ID 2660

Other Names
Growth/differentiation factor 8, GDF-8, Myostatin, MSTN, GDF8

Dilution
E~~1/10000
WB~~1/500 - 1/2000
FC~~1/200 - 1/400
IHC~~1/200 - 1/1000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MSTN Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MSTN Antibody - Protein Information

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Name MSTN

Synonyms GDF8

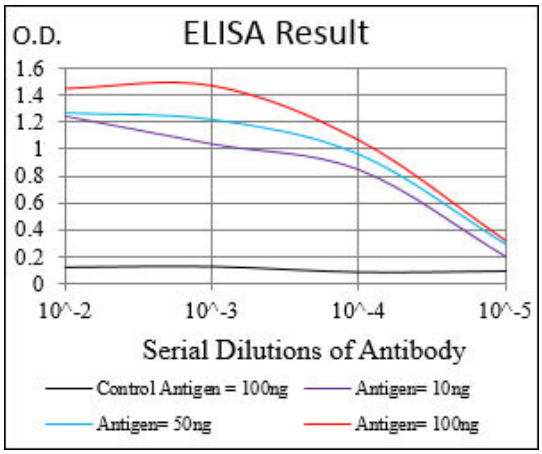
Function
Acts specifically as a negative regulator of skeletal muscle growth.

Cellular Location
Secreted {ECO:0000250|UniProtKB:O08689}.

MSTN Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



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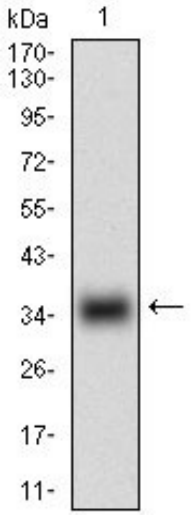

Figure 1: Western blot analysis using MSTN mAb against human MSTN (AA:24-266) recombinant protein. (Expected MW is 28.9 kDa)

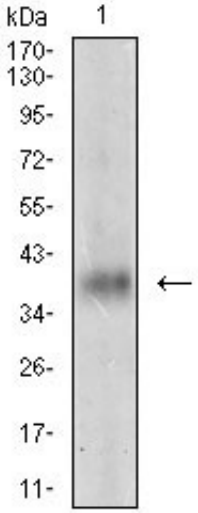

Figure 2: Western blot analysis using MSTN mouse mAb against LNcap cell lysate.

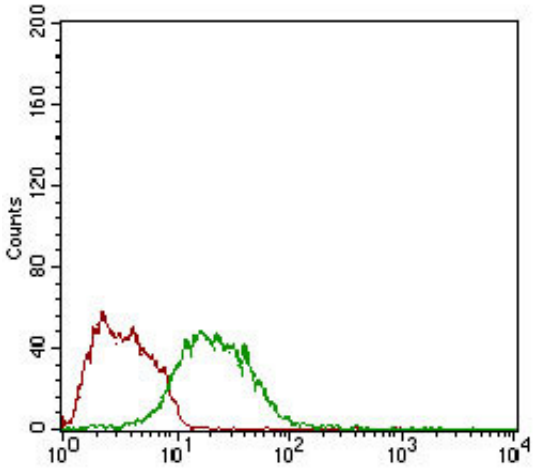

Figure 3: Flow cytometric analysis of LNcap cells using MSTN mouse mAb (green) and negative control (red).

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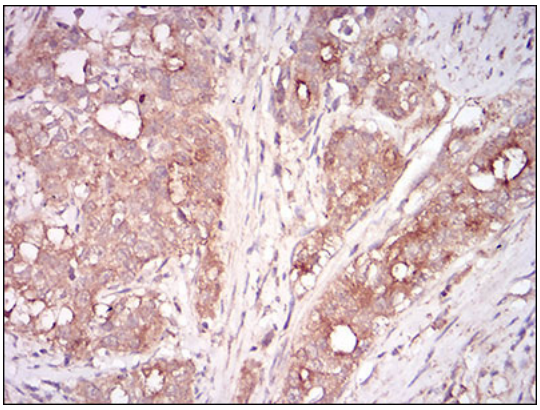

Figure 4: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using MSTN mouse mAb with DAB staining.

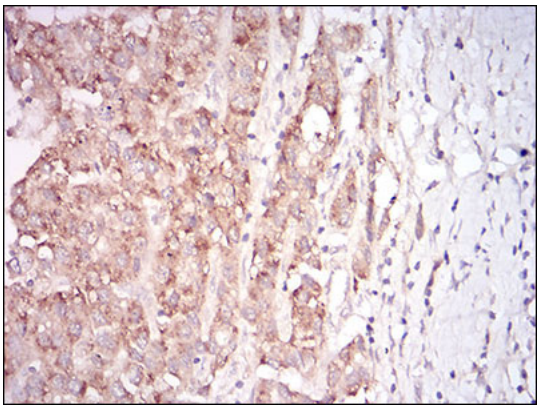

Figure 5: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using MSTN mouse mAb with DAB staining.

MSTN Antibody - Background

This gene encodes a member of the NeuroD family of basic helix-loop-helix (bHLH) transcription factors. The protein forms heterodimers with other bHLH proteins and activates transcription of genes that contain a specific DNA sequence known as the E-box. It regulates expression of the insulin gene, and mutations in this gene result in type II diabetes mellitus. ; ; ;

MSTN Antibody - References

1. Eur J Endocrinol. 2012 Dec;167(6):873-80. 2. Biochem J. 2012 Aug 15;446(1):23-36.