

Product datasheet for MR227629

Mstn (NM_010834) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mstn (NM_010834) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mstn
Synonyms:	Cmpt; Gdf8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR227629 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATGCAAAAACGCAATGTATGTTTATATTTACCTGTTTCATGCTGATTGCTGCTGGCCAGTGGATC
TAAATGAGGGCAGTGAGAGAGAAGAAAATGTGGAAAAGAGGGGCTGTGTAATGCATGTGCGTGGAGACA
AAACACGAGGTACTCCAGAATAGAAGCCATAAAAATTCAAATCCTCAGTAAGCTGCGCTGGAAACAGCT
CCTAACATCAGCAAAGATGCTATAAGACAACCTTCTGCCAAGAGCGCTCCACTCCGGAACTGATCGATC
AGTACGACGTCCAGAGGGATGACAGCAGTGATGGCTCTTTGGAAGATGACGATTATCACGCTACCACGGA
AACAAATCATTACCATGCCTACAGAGTCTGACTTTCTAATGCAAGCGGATGGCAAGCCAAATGTTGCTTT
TTTAAATTTAGCTCTAAAATACAGTACAACAAAGTAGTAAAAGCCCAACTGTGGATATATCTCAGACCCG
TCAAGACTCCTACAACAGTGTGTTGTGCAAACTCCTGAGACTCATCAAAACCCATGAAAGACGGTACAAGGTA
TACTGGAATCCGATCTCTGAACTTGACATGAGCCAGGCACTGGTATTTGGCAGAGTATTGATGTGAAG
ACAGTGTGCAAAATGGCTCAAACAGCCTGAATCCAATTAGGCATTGAAATCAAAGCTTTGGATGAGA
ATGGCCATGATCTTGCTGTAACCTTCCCAGGACCAGGAGAAGATGGGCTGAATCCCTTTTAGAAGTCAA
GGTGACAGACACCCCAAGAGGTCCCGGAGAGACTTTGGGCTTGACTGCGATGAGCACTCCACGGAAATCC
CGGTGCTGCCGCTACCCCTCACGGTCGATTTTGAAGCCTTTGGATGGGACTGGATTATCGCACCCAAAA
GATATAAGGCCAATTACTGCTCAGGAGAGTGTGAATTTGTGTTTTACAAAAATATCCGCATACTCATCT
TGTGCACCAAGCAAAACCCAGAGGCTCAGCAGGCCCTTGCTGCACTCCGACAAAAATGTCTCCATTAAT
ATGCTATATTTAATGGCAAAGAACAATAATATATGGGAAAATTCAGCCATGGTAGTAGACCGCTGTG
GGTGCTCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR227629 protein sequence
 Red=Cloning site Green=Tags(s)

MMQKLQMYVYIYLFMLIAAGPVDLNEGSEREENVEKEGLCNACAWRQNTSRISIEAIKIQLSKLRLETA
 PNISKDAIRQLLPRAPPLRELIDQYDVQRDDSSDGSLEDDDYHATTETIIITMPTESDFLMQADGPKKCCF
 FKFSKIQYNKVKAQLWIYLRPVKTPPTVFVQILRLIKPMKDGTRYTGIRSLKLDMSPGTGIWQSIDVK
 TVLQNWLKQPESNLGIEIKALDENGHDLAVTFPGPGEDGLNPFLEVKVTDTPKRSRRDFGLDCDEHSTES
 RCCRYPLTVDFEAFGWDWIIAPKRYKANYCSGECEVFVFLQKYPHTLHVQANPRGSAGPCCTPTKMSPIN
 MLYFNGKEQIIYGKIPAMVVDRCGCS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_010834

ORF Size: 1131 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_010834.3](#)

RefSeq Size: 2682 bp

RefSeq ORF: 1131 bp

Locus ID: 17700

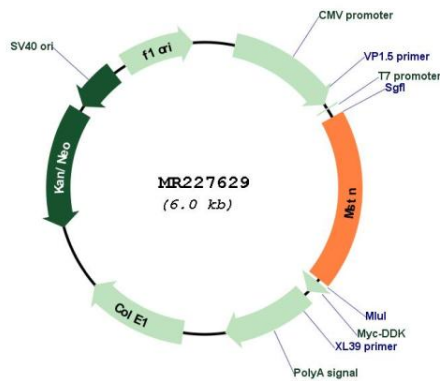
UniProt ID: [O08689](#)

Cytogenetics: 1 26.99 cM

MW: 42.9 kDa

Gene Summary: This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. This protein negatively regulates skeletal muscle cell proliferation and differentiation. Homozygous knockout mice for this gene exhibit increased muscle mass and bone density, and reduced adiposity. [provided by RefSeq, Jul 2016]

Product images:



Circular map for MR227629