

Myostatin (MSTN) Active Protein | MSTN active protein

Active Myostatin (MSTN)

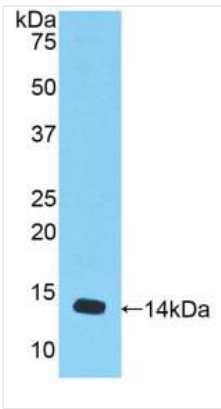
CATALOG # AAA149248	HOST E. coli	APPLICATIONS Activity Assay, Cell Culture
-------------------------------	------------------------	---

PRODUCT SYNONYMS

Myostatin (MSTN); Active Myostatin (MSTN); GDF8; Growth Differentiation Factor 8; MSTN active protein

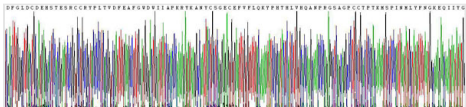
PRODUCT SPECIFICATIONS

Host	E. coli
Purity/Purification	> 95%
Form/Format	20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.
Applicable Applications for MSTN active protein	Activity Assay, Cell Culture
Organism Species	Mus musculus (Mouse)
Source	Prokaryotic expression.
Residues	Asp268~Ser376
Tags	N-terminal His-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Predicted isoelectric point	6.5
Reconstitution	Reconstitute in ddH ₂ O to a concentration of 0.05-0.1 mg/mL. Do not vortex
Preparation and Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.



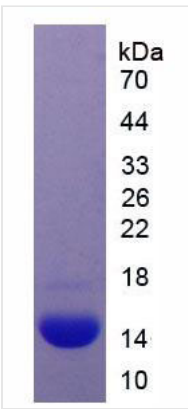
WB (Western Blot)

Figure 4. Western BlotSample: Recombinant MSTN, Mouse;Antibody: Rabbit Anti-Mouse MSTN Ab



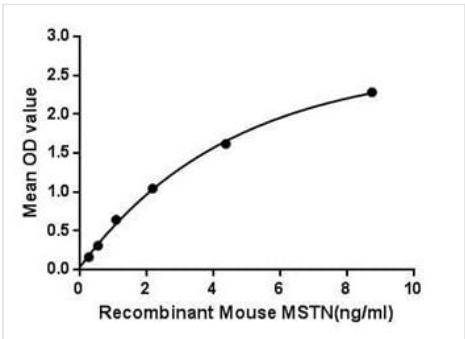
Identification

Figure 2. Gene Sequencing (Extract)



SDS_PAGE

Figure 3. SDS-PAGESample: Active recombinant MSTN, Mouse



Bioactivity

Figure. The binding activity of MSTN with FSTL3. Myostatin (MSTN) also known as growth differentiation factor 8 (GDF-8) a myokine, a protein produced and released by myocytes. It inhibit myogenesis including muscle cell growth and differentiation. Myostatin is a secreted growth differentiation factor that is a member of the TGF beta protein family. Besides, Follistatin Like Protein 3 (FSTL3) has been identified as an interactor of MSTN, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse MSTN and recombinant mouse FSTL3. Briefly, MSTN were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to FSTL3-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-MSTN pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of MSTN and FSTL3 was shown in Figure 1, and this effect was in a dose dependent manner. Figure 1. The binding activity of MSTN with FSTL3.

DFG LDCDEHSTES RCCRYPLTVD FEAFGWDWII
APKRYKANYC SGECEVFVLQ KYPTHLLVHQ ANPRGSAGPC CPTKMSPIN
MLYFNGKEQI IYGIKIPAMVV DRGCS

Sequence

ADDITIONAL INFORMATION

Related Product Information for MSTN active protein

Myostatin (MSTN) also known as growth differentiation factor 8 (GDF-8) a myokine, a protein produced and released by myocytes. It inhibit myogenesis including muscle cell growth and differentiation. Myostatin is a secreted growth differentiation factor that is a member of the TGF beta protein family. Besides, Follistatin Like Protein 3 (FSTL3) has been identified as an interactor of MSTN, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse MSTN and recombinant mouse FSTL3. Briefly, MSTN were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to FSTL3-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-MSTN pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of MSTN and FSTL3 was shown in Figure 1, and this effect was in a dose dependent manner.

Product Categories/Family for MSTN
active protein

Cytokine; Metabolic pathway; Bone metabolism

NCBI AND UNIPROT INFORMATION

NCBI GI #	6754752
NCBI GeneID	17700
NCBI Accession #	NP_034964.1
NCBI GenBank Nucleotide #	NM_010834.3
UniProt Accession #	O08689
Molecular Weight	Predicted Molecular Mass: 13.9kDa Accurate Molecular Mass: 15kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	growth/differentiation factor 8 preproprotein
NCBI Official Synonym Full Names	myostatin
NCBI Official Symbol	Mstn
NCBI Official Synonym Symbols	Cmpt; Gdf8
NCBI Protein Information	growth/differentiation factor 8
UniProt Protein Name	Growth/differentiation factor 8
UniProt Gene Name	Mstn
UniProt Synonym Gene Names	Gdf8; GDF-8

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/myostatin-mstn/149248>