

Myostatin (MSTN) Active Protein | MSTN active protein

Active Myostatin (MSTN)

CATALOG #
AAA149249

APPLICATIONS
Activity Assay, Cell Culture

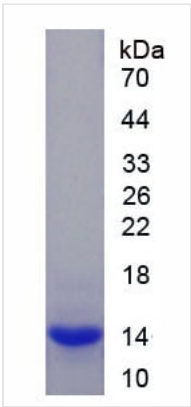
PRODUCT SYNONYMS

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

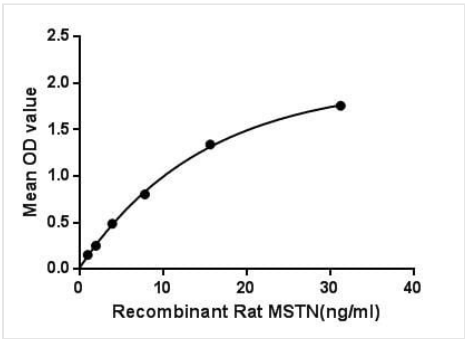
PRODUCT SPECIFICATIONS

Purity/Purification	> 95%
Form/Format	Freeze-Dried Powder; 20mM Tris, 150mM NaCl, pH8.0, Containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Arg267~Ser376
Sequence Length	376
Applicable Applications for MSTN active protein	Activity Assay, Cell Culture
Species	Rat
Tag	N-terminal His-Tag
Isoelectric Point	6.8
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. 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 degree 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.

IMAGES



SDS-PAGE



Activity

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 rat MSTN and recombinant rat 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.

ADDITIONAL INFORMATION

Product Categories/Family for MSTN active protein	Cytokine; Metabolic pathway; Bone metabolism
---	--

NCBI AND UNIPROT INFORMATION

NCBI GI #	9506907
NCBI GeneID	29152
NCBI Accession #	NP_062024.1
NCBI GenBank Nucleotide #	NM_019151.1
UniProt Accession #	O35312
Molecular Weight	Predicted MW: 13.8kDa Accurate MW: 14kDa
NCBI Official Full Name	growth/differentiation factor 8
NCBI Official Synonym Full Names	myostatin
NCBI Official Symbol	Mstn
NCBI Official Synonym Symbols	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://www.aaabiotech.com/active-protein/myostatin-mstn/149249>