

Myoglobin Active Protein | MYO active protein

Active Myoglobin (MYO)

CATALOG #
AAA150089

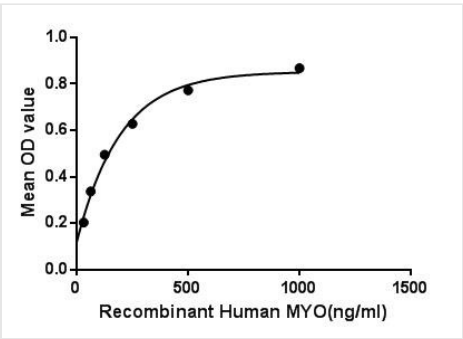
APPLICATIONS
Activity Assay, Cell Culture

PRODUCT SYNONYMS

Myoglobin; Active Myoglobin (MYO); PVALB; MB; MYO active protein

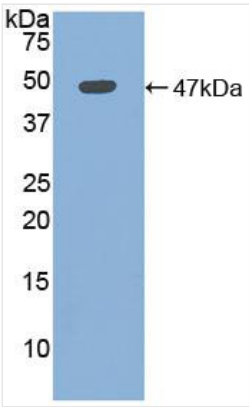
PRODUCT SPECIFICATIONS

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	Met1~Gly154
Sequence Length	154
Applicable Applications for MYO active protein	Activity Assay, Cell Culture
Species	Human
Tag	N-terminal His and GST Tag
Isoelectric Point	6.9
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. Stability: 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.



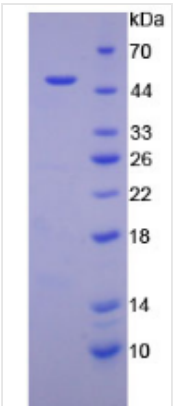
Bioactivity

Myoglobin (symbol Mb or MB or MYO) is an iron- and oxygen-binding protein found in the muscle tissue of vertebrates in general and in almost all mammals. It is related to hemoglobin, which is the iron- and oxygen-binding protein in blood, specifically in the red blood cells. Myoglobin is found in Type I muscle, Type II A and Type II B, but most texts consider myoglobin not to be found in smooth muscle. Besides, Proteasome 26S Subunit, Non ATPase 4 (PSMD4) has been identified as an interactor of MYO, thus a binding ELISA assay was conducted to detect the interaction of recombinant human MYO and recombinant human PSMD4. Briefly, MYO were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100L were then transferred to PSMD4-coated microtiter wells and incubated for 2h at 37. Wells were washed with PBST and incubated for 1h with anti-MYO 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. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of MYO and PSMD4 was shown in Figure 1, and this effect was in a dose dependent manner. Figure. The binding activity of MYO with PSMD4.



WB (Western Blot)

Figure. Western Blot; Sample: Recombinant MYO, Human; Antibody: Rabbit Anti-Human MYO Ab (PAA480Hu01)



SDS-PAGE

Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for MYO active protein	Cardiovascular biology
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4885477
NCBI GeneID	4151
NCBI Accession #	NP_005359.1
NCBI GenBank Nucleotide #	NP_005359.1
UniProt Accession #	P02144

Molecular Weight	Predicted Molecular Mass: 47.2kDa Accurate Molecular Mass: 47kDa
NCBI Official Full Name	myoglobin isoform 1
NCBI Official Synonym Full Names	myoglobin
NCBI Official Symbol	MB
NCBI Official Synonym Symbols	PVALB
NCBI Protein Information	myoglobin
UniProt Protein Name	Myoglobin
UniProt Gene Name	MB
UniProt Entry Name	MYG_HUMAN

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.

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Online datasheet: <https://www.aaabiotech.com/myo-active-protein/myoglobin/150089>