

Collagen Type VI Alpha 1 (COL6a1) Active Protein | COL6a1 active protein

Active Collagen Type VI Alpha 1 (COL6a1)

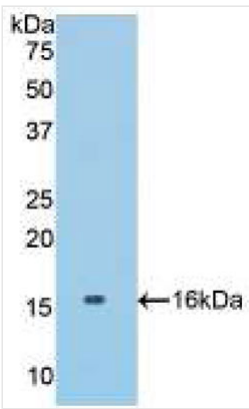
CATALOG # AAA149258	HOST E. coli	REACTIVITY Mus musculus (Mouse)	APPLICATIONS Activity Assay
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PRODUCT SYNONYMS

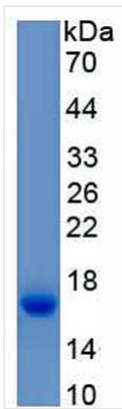
Collagen Type VI Alpha 1 (COL6a1); Active Collagen Type VI Alpha 1 (COL6a1); COL6a1 active protein

PRODUCT SPECIFICATIONS

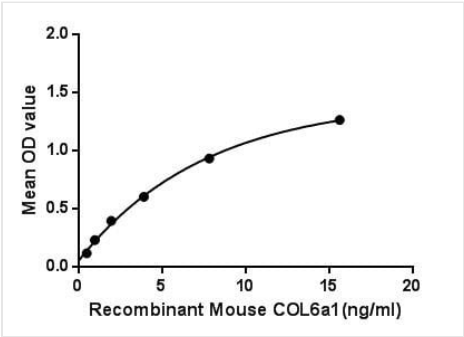
Host	E. coli
Reactivity	Mus musculus (Mouse)
Purity/Purification	>95%
Form/Format	PBS, pH7.4, containing 0.01% Sarcosyl, 5% Trehalose.
Concentration	Original Concentration: 1200ug/mL (varies by lot)
Applicable Applications for COL6a1 active protein	Activity Assay
Source	Prokaryotic expression.
Residues	Asn82~Phe212
Tags	N-terminal His-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	6.3
Usage	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree 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 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.



WB (Western Blot)
Western Blot Sample: Recombinant COL6a1, Mouse; Antibody: Rabbit Anti-Mouse COL6a1 Ab



SDS-PAGE
Sample: Active recombinant COL6a1, Mouse



Sequence

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GLTRMPSGRD ELKASVDAVK YFGKGYTDC AIKKGLEELL IGGSHLKENK  
YLIIVTDGHP LEGYKEPCGG LEDAVNEAKH LGIKVFSVAI TPDHLEPRLS  
IIATDHTYRR NF
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Application Data
The collagens are a superfamily of proteins that play a role in maintaining the integrity of various tissues. Collagen VI is a major structural component of microfibrils. The basic structural unit of collagen VI is a heterotrimer of the alpha1(VI), alpha2(VI), and alpha3(VI) chains. The protein encoded by COL6a1 gene is the alpha 1 subunit of type VI collagen (alpha1(VI) chain). Mutations in the genes that code for the collagen VI subunits result in the autosomal dominant disorder, Bethlem myopathy. Besides, Retbindin (RTBDN) has been identified as an interactor of COL6a1, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse COL6a1 and recombinant mouse RTBDN. Briefly, COL6a1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to RTBDN-coated microtiter wells and incubated for 2h at 37?. Wells were washed with PBST and incubated for 1h with anti-COL6a1 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 COL6a1 and RTBDN was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for COL6a1 active protein	Metabolic pathway; Developmental science; Nutrition metabolism; Bone metabolism
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NCBI AND UNIPROT INFORMATION

NCBI GI #	6753484
NCBI GeneID	12833
NCBI GenBank Nucleotide #	NM_009933.4
Molecular Weight	Predicted Molecular Mass: 15.8kDa Accurate Molecular Mass: 16kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	collagen alpha-1(VI) chain

NCBI Official Synonym Full Names	collagen, type VI, alpha 1
NCBI Official Symbol	Col6a1
NCBI Official Synonym Symbols	Col6a-1; AI747156
NCBI Protein Information	collagen alpha-1(VI) chain
UniProt Protein Name	Collagen alpha-1(VI) chain
UniProt Gene Name	Col6a1

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://stage.aaabiotech.com/e-coli-mouse-mus-musculus-active-protein/collagen-type-vi-alpha-1-col6a1/149258>