

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

Active Collagen Type VI Alpha 1 (COL6a1)

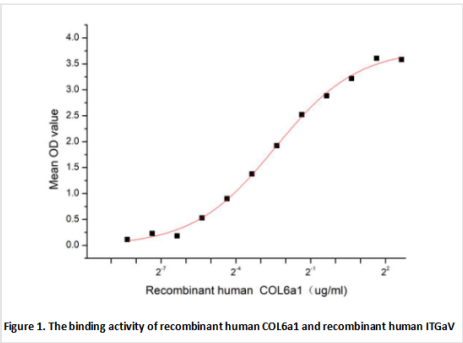
CATALOG # AAA161878	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Collagen Type VI Alpha 1 (COL6a1); Active Collagen Type VI Alpha 1 (COL6a1); Collagen Type VI Alpha 1; COL6-A1; OPLL; Collagen Alpha-1(VI)chain4; COL6a1 active protein

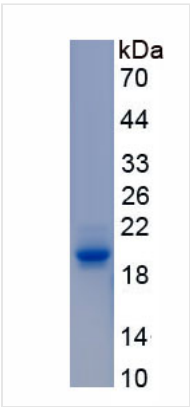
PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Ala828-Ser 1022
Applicable Applications for COL6a1 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.8
Research Area	Metabolic pathway, Developmental science, Nutrition metabolism, Bone metabolism
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



Bioactivity

Collagen alpha-1(VI) chain (COL6a1) is a protein that in humans, the collagens are a superfamily of proteins that play a role in maintaining the integrity of various tissues. Collagens are extracellular matrix proteins and have a triple-helical domain as their common structural element. Besides, Integrin Alpha V (ITGaV) has been identified as an interactor of COL6A1, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human COL6a1 and recombinant human ITGaV. Briefly, COL6a1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to ITGaV -coated microtiter wells and incubated for 2h at 37 degree C. 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 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human COL6a1 and recombinant human ITGaV was shown in Figure 1, the EC50 for this effect is 0.19 ug/mL.



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for COL6a1 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	87196339
NCBI GeneID	1291
NCBI Accession #	NP_001839.2
NCBI GenBank Nucleotide #	NM_001848.2
UniProt Accession #	P12109; O00117; O00118; Q14040; Q14041; Q16258; Q7Z645; Q9BSA8
Molecular Weight	108,529 Da
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	OPLL
NCBI Protein Information	collagen alpha-1(VI) chain; collagen alpha-1(VI) chain; alpha 1 (VI) chain (61 AA); collagen VI, alpha-1 polypeptide
UniProt Protein Name	Collagen alpha-1(VI) chain
UniProt Gene Name	COL6A1
UniProt Entry Name	CO6A1_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.

