

Collagen Type I Alpha 1 (COL1a1) Recombinant Protein | COL1a1 recombinant protein

Recombinant Collagen Type I Alpha 1 (COL1a1)

CATALOG # AAA134217	HOST E. coli	REACTIVITY Human	APPLICATIONS Western Blot, SDS-Page
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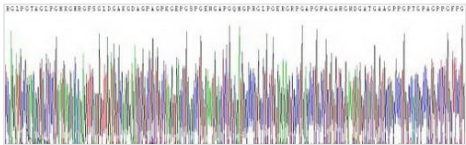
PRODUCT SYNONYMS

Collagen Type I Alpha 1 (COL1a1); Recombinant Collagen Type I Alpha 1 (COL1a1); COL1a1 recombinant protein

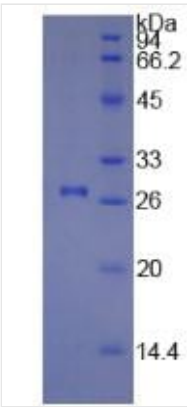
PRODUCT SPECIFICATIONS

Host	E. coli
Reactivity	Human
Purity/Purification	>95%
Form/Format	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5%Trehalose and Proclin300
Concentration	200µg/mL (varies by lot)
Applicable Applications for COL1a1 recombinant protein	WB (Western Blot), SDS-PAGE, Immunogen, Positive Control
Source	Prokaryotic expression
Residues	Arg253~Ala471
Tags	N-terminal His-Tag
Tissue Specificity	Kidney
Subcellular Location	Secreted, extracellular space, extracellular matrix
Traits	Freeze-dried powder
Predicted isoelectric point	9.5
Predicted Molecular Mass	20.7kDa
Accurate Molecular Mass	27kDa as determined by SDS-PAGE reducing conditions
Phenomenon explanation	The possible reasons that the actual band size differs from the predicted are as follows: 1. Splice variants: Alternative splicing may create different sized proteins from the same gene. 2. Relative charge: The composition of amino acids may affects the charge of the protein. 3. Post-translational modification: Phosphorylation, glycosylation, methylation etc. 4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form. 5. Polymerization of the target protein: Dimerization, multimerization etc.
Usage	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) 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°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.

IMAGES



Application Data



SDS-PAGE

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RGLPGTAG LPMKGHRGF SGLDGAKGDA GPAGPKGEPG SPGENGAPGQ
MGRPLPGER GRPGAPGPAG ARGNDGATGA AGPPGPTGPA GPPGFPGAVG
AKGEAGPQGP RGSEGPQGVV GEPGPPGPAG AAGPAGNPGA DGQPGAKGAN
GAPGIAGAPG FPGARGPSGP QGPGGPPGPK GNSGEPGAPG SKGDTGAKGE
PGPVGVQGP GPAGEEGKRG A
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Sequence

NCBI AND UNIPROT INFORMATION

NCBI GI #	110349772
NCBI GeneID	1277
NCBI Accession #	NP_000079.2
NCBI GenBank Nucleotide #	NM_000088.3
UniProt Accession #	P02452; O76045; P78441; Q13896; Q13902; Q13903; Q14037; Q14992; Q15176; Q15201; Q16050; Q59F64
NCBI Official Full Name	collagen alpha-1(I) chain preproprotein
NCBI Official Synonym Full Names	collagen, type I, alpha 1
NCBI Official Symbol	COL1A1
NCBI Official Synonym Symbols	OI4
NCBI Protein Information	collagen alpha-1(I) chain; collagen alpha-1(I) chain; alpha-1 type I collagen; pro-alpha-1 collagen type 1; collagen alpha 1 chain type I; collagen alpha-1(I) chain preproprotein; collagen of skin, tendon and bone, alpha-1 chain
UniProt Protein Name	Collagen alpha-1(I) chain
UniProt Gene Name	COL1A1
UniProt Entry Name	CO1A1_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://stage.aaabiotech.com/col1a1-recombinant-protein-e-coli-wb-western-blot-sds-page-immunogen-positive-control/134217>