

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

Recombinant Collagen Type I Alpha 1 (COL1a1)

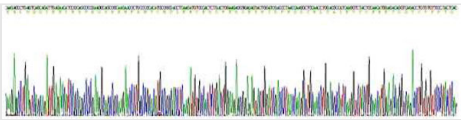
CATALOG # AAA20234	HOST E.coli	APPLICATIONS SDS-Page, Western Blot
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PRODUCT SYNONYMS

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

PRODUCT SPECIFICATIONS

Host	E.coli
Purity/Purification	> 90%
Form/Format	20mM Tris, 150mM NaCl, pH8.0, containing 0.01% SKL, 5% Trehalose.
Concentration	Original Concentration: 200ug/mL (varies by lot)
Applicable Applications for COL1a1 recombinant protein	Positive Control, Immunogen, SDS-PAGE, WB (Western Blot)
Organism Species	Mus musculus (Mouse)
Source	Prokaryotic expression
Residues	Gly22~Ser154
Tags	N-terminal His and GST Tag
Subcellular Location	Secreted
Traits	Freeze-dried powder
Predicted isoelectric point	6.2
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 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.



Identification

SDS-PAGE

QVEDIPEVS CIHNGLRVPN GETWKPEVCL
ICICHNGTAV CDDVCNEEL DCPNPQRREG ECCAFCEEV VSPNSEDVGV
EGPKGDGPQ GPRGPVGGP RDGIPGQGL PGPPGPPGP GPPGLGNFA
SQMS

Sequence Information

NCBI AND UNIPROT INFORMATION

NCBI GI #	34328108
NCBI GeneID	12842
NCBI Accession #	NP_031768.2
NCBI GenBank Nucleotide #	NM_007742.3
UniProt Accession #	P11087; Q53WT0; Q60635; Q61367; Q61427; Q63919; Q6PCL3; Q810J9
Molecular Weight	Predicted Molecular Mass: 43.7kDa Accurate Molecular Mass: 49kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	collagen alpha-1(I) chain
NCBI Official Synonym Full Names	collagen, type I, alpha 1
NCBI Official Symbol	Col1a1
NCBI Official Synonym Symbols	Cola1; Mov13; Cola-1; Mov-13; Col1a-1
NCBI Protein Information	collagen alpha-1(I) chain; collagen alpha-1(I) chain; alpha-1 type 1 collagen; alpha-1 type I collagen; procollagen, type I, alpha 1
UniProt Protein Name	Collagen alpha-1(I) chain
UniProt Gene Name	Col1a1
UniProt Synonym Gene Names	Cola1
UniProt Entry Name	CO1A1_MOUSE

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.