



Recombinant Mouse Collagen alpha-1 (X) chain (Col10a1)

Product Code	CSB-EP005715MO-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	Q05306
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	≥85% (SDS-PAGE)
Sequence	MF YAERYQTPTG IKGPLASPKT QYFIPYAIKS KGIPVRGEQG IPGPPGPTGP RGHPGSPGPP GKPGYGSPLG QGEPGLPGPP GISATGKPLG PGPPGKPGER GPYGHKGDIG PAGLPGPRGP PGPPGIPGPA GISVPGKPGQ QQLTGAPGPR GFPGEKGAQG APGVNKRKGE TGYGSPGRPG ERGLPGPQGP IGPPGPSGVG RRGENGFPQG PGIKGDGRFP GEMGPSGPPG PQGPPGKQGR EGIGKPGAIG SPGQPGIPGE KGHPGAPGIA GPPGAPGFGK QQLPGLRGQR GPAGLPGAPG AKGERGPAGH PGEPGLPGSP GNMGPQGPKG IPGNHGIPGA KGEIGLVGPA GPPGARGARG PPGLDGKTGY PGEPGLNGPK GNPGLPGQKG DPGVGGTPGL RGPVGPVGA GVPGHNGEAG PRGEPGIPGT RGPTGPPGVP GFPGSKGDPG NPGAPGPAI ATKGLNGPTG PPGPPGPRGH SGEPGLPGPP GPPGPPGQAV MPDGFKAGQ RPRLSGMPLV SANHGVTGMP VSAFTVILSK AYPVGAIP FDEILYNRQQ HYDPRSGIFT CKIPGIYYFS YHVHVKGTHV WGLYKNGTP TMYTYDEYSK GYLDQASGSA IMELTENDQV WLQLPNAESN GLYSSEYVHS SFSGFLVAPM
Source	E.coli
Target Names	Col10a1
Protein Names	Recommended name: Collagen alpha-1(X) chain
Expression Region	19-680
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	This gene encodes the alpha chain of type X collagen, a short chain collagen expressed by hypertrophic chondrocytes during endochondral ossification. Unlike type VIII collagen, the other short chain collagen, type X collagen is a homotrimer. Mutations in this gene are associated with Schmid type metaphyseal chondrodysplasia (SMCD) and Japanese type spondylometaphyseal dysplasia (SMD).
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a



concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.