



Recombinant Rat Collagen alpha-1 (IX) chain (Col9a1)

Product Code	CSB-MP005757RA
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P20850
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	≥85% (SDS-PAGE)
Sequence	PGQLGNSGKP GQQGPPGEVG PRGPRGLPGS RGPVGPEGSP GIPGKLGPLG SPGLPGLPGP PGLPGMKGDR GVFGEPPGPKG EQGASGEEGE AGVRGDLGDM GQPGPKGSVG NPGEPLRGP EGIRGLPGVE GPRGPPGPRG VQGEQGATGL PGIQGPPGRA PTDQHIKQVC MRVVQEHFAE MAASLKRPTD GASGLPGRPG PPGPPGPPGE NGFPGQMGIR GLPGIKGPPG ALGLRGPKGD LGEKGERGPP GRGPKGLPGA IGLPDGPSPA SYGKNGRDGE QGPPGVAGIP GVPGPPGPPG PPGFCEPASC TLQAGQRAFS KGPDK
Source	Mammalian cell
Target Names	Col9a1
Protein Names	Recommended name: Collagen alpha-1(IX) chain
Expression Region	1-325
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 protein
Target Details	This gene encodes one of the three alpha chains of type IX collagen, which is a minor (5-20%) collagen component of hyaline cartilage. Type IX collagen is usually found in tissues containing type II collagen, a fibrillar collagen. Studies in knockout mice have shown that synthesis of the alpha 1 chain is essential for assembly of type IX collagen molecules, a heterotrimeric molecule, and that lack of type IX collagen is associated with early onset osteoarthritis. Mutations in this gene are associated with osteoarthritis in humans, with multiple epiphyseal dysplasia, 6, a form of chondrodysplasia, and with Stickler syndrome, a disease characterized by ophthalmic, orofacial, articular, and auditory defects. Two transcript variants that encode different isoforms have been identified for this gene.
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.