



Recombinant Human Collagen alpha-3 (IV) chain (COL4A3), partial

Product Code	CSB-YP005743HU
Storage	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.
Uniprot No.	Q01955
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	GLKKGKRGDSGSPATWTRGFVTRHSQTTAIPSCPEGTVPLYSGFSFLFVQG NQRAHGQDLGTLGSLQRFTTMPFLFCNVNDVCNFASRNDYSYWLSTPALM PMNMAPITGRALEPYISRCTVCEGPAIAIAVHSQTTDIPPCPHGWISLWKGFSFI MFTSAGSEGTGQALASPGSCLEEFRASPFLECHGRGTCNYYSNSYSFWLASL NPERMFRKPIPSTVKAGELEKIISRCQVCMKK
Research Area	Cell Adhesion
Source	Yeast
Target Names	COL4A3
Expression Region	1427-1668aa
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Partial
Target Details	Type IV collagen, the major structural component of basement membranes, is a multimeric protein composed of 3 alpha subunits. These subunits are encoded by 6 different genes, alpha 1 through alpha 6, each of which can form a triple helix structure with 2 other subunits to form type IV collagen. This gene encodes alpha 3. In the Goodpasture syndrome, autoantibodies bind to the collagen molecules in the basement membranes of alveoli and glomeruli. The epitopes that elicit these autoantibodies are localized largely to the non-collagenous C-terminal domain of the protein. A specific kinase phosphorylates amino acids in this same C-terminal region and the expression of this kinase is upregulated during pathogenesis. There are multiple alternate transcripts that appear to be unique to this human alpha 3 gene and alternate splicing is restricted to the six exons that encode this C-terminal domain. This gene is also linked to an autosomal recessive form of Alport syndrome. The mutations contributing to this syndrome are also located within the exons that encode this C-terminal region. Like the other members of the type IV collagen gene family, this gene is organized in a head-to-head conformation with another type IV collagen gene so that each gene pair shares a common promoter. Some exons of this gene are interspersed with exons of an uncharacterized gene which is on the opposite



strand.

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.