

Collagen Type IV Alpha 3 Recombinant Protein | COL4A3 recombinant protein

Recombinant Human Collagen Type IV Alpha 3, Biotinylated

CATALOG #
AAA38053

HOST
Sf9 insect cells.

PRODUCT SYNONYMS

Collagen Type IV Alpha 3; Recombinant Human Collagen Type IV Alpha 3; Biotinylated; Collagen Type IV Alpha 3 Human Recombinant; Collagen alpha-3(IV) chain; Goodpasture antigen; COL4A3; Glomerular Basal Membrane; GBM; COL4A3 Human; Biotin; COL4A3 recombinant protein

PRODUCT SPECIFICATIONS

Host	Sf9 insect cells.
Purity/Purification	Greater than 87% as determined by Capillary Electrophoresis.
Form/Format	Sterile filtered clear solution. COL4A3 Human biotin (0.9 mg/mL) contains 20mM HEPES, pH 7.5, 0.02% SDS and 0.01mM EDTA.
Sequence Length	199
Immunological Functions	1. Binds IgG type human auto antibodies. 2. Functional Streptavidin based ELISA test (analysis of positive/negative samples.)
Note	It has been reported that the immunodominant epitope of COL4A3 is a cryptic epitope that is not easily accessible to the corresponding autoantibodies. It is necessary to treat the protein under nonreducing conditions with a denaturant such as urea to unmask the epitopes (see Hellmark et al. in Autoantibodies, Peter, J.B. and Shoenfeld, Y., eds., Elsevier B.V., 1996, pp 291-298).
Preparation and Storage	Store at 4 degree C if entire vial will be used within 2-4 weeks. Store, frozen at -20 degree C for longer periods of time. Avoid multiple freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for COL4A3 recombinant protein	Description: Human alpha3 chain of collagen IV; identical with the antigen called "glomerular basal membrane antigen" (GBM). Calculated Molecular weight: 42kDa. Calculated isoelectric point: pH 8.9. cDNA coding for a minicollagen version of the human collagen IV alpha3 chain fused to a 6-histidine purification tag. The term minicollagen designates the removal of most of the epitope-less triplehelical collagenous region (situated between the N-terminal 7S domain and the C-terminal noncollagenous NC1 domain), which is a requirement for recombinant production of this antigen. Introductions: Type IV collagen is a major structural component of basement membranes. It is a multimeric protein composed of 3 alpha subunits, which are encoded by 6 different genes, alpha 1 through alpha 6. Each of these alpha subunits can form a triple helix structure with 2 other subunits to form type IV collagen. The Goodpasture syndrome is a condition in which autoantibodies bind to the collagen molecules in the basement membranes of alveoli and glomeruli. The epitopes that elicit these autoantibodies are restricted basically to the non-collagenous C-terminal domain of the protein. There are numerous alternative transcripts that appear to be unique to the human COL4A3 and alternative splicing is limited to the six exons that encode this C-terminal domain. COL4A3 is also linked to an autosomal recessive form of Alport syndrome. The mutations contributing to the Alport syndrome are also situated within the exons that encode this C-terminal region. COL4A3 is organized in a head-to-head conformation with another type IV collagen gene so that each gene pair shares a common promoter. Several exons of COL4A3 are interspersed with exons of an uncharacterized gene which is on the opposite strand.
Product Categories/Family for COL4A3 recombinant protein	Recombinant & Natural Proteins

NCBI AND UNIPROT INFORMATION

NCBI GI #	409107
NCBI GeneID	1285
Molecular Weight	158,336 Da
NCBI Official Full Name	collagen type IV alpha 3, partial
NCBI Official Synonym Full Names	collagen type IV alpha 3 chain
NCBI Official Symbol	COL4A3
NCBI Protein Information	collagen alpha-3(IV) chain
UniProt Protein Name	Collagen alpha-3(IV) chain
UniProt Gene Name	COL4A3

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://www.aaabiotech.com/col4a3-recombinant-protein-sf9/38053>