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# COL4A3/COL4A5/COL4A2/COL4A1 (AB3125) Rabbit mAb

**M2390**

## Key Features

**Host Species**
• Rabbit

**Reactivity**
• Human

**Applications**
• IF/ICC, ELISA

**MW**
• 162 kDa (calculated)
• Refer to figures kDa (observed)

**Isotype**
• IgG

## Recommended Dilution Ratios

| Application | Dilution |
|---|---|
| IF/ICC, ELISA | IF/ICC, 1:100-1:400 \| ELISA, Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements. |

## Storage

| | |
|---|---|
| **Storage Conditions** | Store at-20℃. Avoid freeze / thaw cycles. |
| **Storage buffer** | The antibody is provided in liquid form in phosphate - buffered saline with 50% glycerol, 0.05% BSA, and 0.09% Sodium azide. |

## Basic Information

| | |
|---|---|
| **Clonality** | Monoclonal |
| **Clone Number** | AB3125 |
| **Immunogen** | Recombinant fusion protein containing a sequence corresponding to amino acids 1555 - 1669 of human Collagen IV. |
| **Specificity** | This antibody detects endogenous levels of COL4A3/COL4A5/COL4A2/COL4A1 protein. |
| **Purification** | Affinity purification Protein A |
| **Concentration** | Product concentration may vary by batch. Please refer to the product COA for details. |

## Target Information

| | |
|---|---|
| **Gene name** | COL4A3 |
| **Protein Name** | COL4A3/COL4A5/COL4A2/COL4A1 |

**Database Link**

| Organism | Swiss Prot. | Gene ID |
|---|---|---|
| Human | Q01955 | 1285 |

**Background**

**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. 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**

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**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.**