# Data Sheet (Cat.No.TMAB-04514)

## Anti-COL4A3/Tumstatin Polyclonal Antibody

### Product Details

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| Ig Type: | IgG |
| Reactivity: | Mouse (predicted:Human,Rat) |
| Molecular Weight: | Theoretical: 27/159 kDa. |
| Purification: | Protein A purified |

### Applications

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| Verified Activity: | Paraformaldehyde-fixed, paraffin embedded (mouse lung tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (COL4A3) Polyclonal Antibody, Unconjugated (TMAB-04514) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining. |
| Application: | IHC-P,IHC-Fr,IF |
| Recommended | IHC-P: 1:100-600; IHC-Fr: 1:100-600; IF: 1:100-600 |

### Properties

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| Stability & Storage: | Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. |
| Shipping: | Shipping with blue ice. |

### Antigen Details

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|---|---|
| Immunogen: | KLH conjugated synthetic peptide: human Tumstatin / Collagen alpha-3(IV) chain |
| Antigen Species: | Human |
| Gene ID: | 1285 |
| Uniprot ID: | Q01955 |

### Research 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 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. [provided by RefSeq, Jun 2010]

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