Best Tools for immunology Research

# Collagen IV Polyclonal Antibody

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| **Catalog No :** | YT5768 |
| **Reactivity :** | Human;Mouse;Rat |
| **Applications :** | WB;ELISA |
| **Target :** | Collagen IV |
| **Fields :** | >>PI3K-Akt signaling pathway;>>Focal adhesion;>>ECM-receptor interaction;>>Relaxin signaling pathway;>>AGE-RAGE signaling pathway in diabetic complications;>>Protein digestion and absorption;>>Amoebiasis;>>Human papillomavirus infection;>>Pathways in cancer;>>Small cell lung cancer |
| **Gene Name :** | COL4A1 |
| **Protein Name :** | Collagen IV |
| **Human Gene Id :** | 1282 |
| **Human Swiss Prot No :** | P02462 |
| **Mouse Gene Id :** | 12826 |
| **Mouse Swiss Prot No :** | P02463 |
| **Immunogen :** | Synthesized peptide derived from Collagen IV . at AA range: 1428-1443 |
| **Specificity :** | Collagen IV Polyclonal Antibody detects endogenous levels of Collagen IV |
| **Formulation :** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| **Source :** | Polyclonal, Rabbit,IgG |
| **Dilution :** | WB 1:500-2000, ELISA 1:10000-20000 |
| **Purification :** | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |

**Concentration :** 1 mg/ml

**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 130kD

**Cell Pathway :** Focal adhesion;ECM-receptor interaction;Pathways in cancer;Small cell lung cancer;

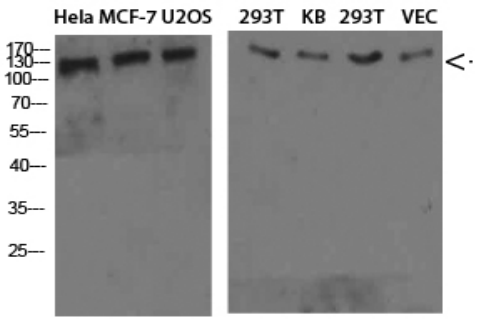
**Background :** This gene encodes a type IV collagen alpha protein. Type IV collagen proteins are integral components of basement membranes. This gene shares a bidirectional promoter with a paralogous gene on the opposite strand. The protein consists of an amino-terminal 7S domain, a triple-helix forming collagenous domain, and a carboxy-terminal non-collagenous domain. It functions as part of a heterotrimer and interacts with other extracellular matrix components such as perlecans, proteoglycans, and laminins. In addition, proteolytic cleavage of the non-collagenous carboxy-terminal domain results in a biologically active fragment known as arresten, which has anti-angiogenic and tumor suppressor properties. Mutations in this gene cause porencephaly, cerebrovascular disease, and renal and muscular defects. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014],

**Function :** disease:Defects in COL4A1 are a cause of brain small vessel disease with hemorrhage [MIM:607595]. Brain small vessel diseases underlie 20 to 30 percent of ischemic strokes and a larger proportion of intracerebral hemorrhages. Inheritance is autosomal dominant.,disease:Defects in COL4A1 are a cause of porencephaly type 1 [MIM:175780]; also known as encephaloclastic porencephaly. Porencephaly is a term used for any cavitation or cerebrospinal fluid-filled cyst in the brain. Porencephaly type 1 is usually unilateral and results from focal destructive lesions such as fetal vascular occlusion or birth trauma. Inheritance is autosomal dominant.,disease:Defects in COL4A1 are the cause of hereditary angiopathy with nephropathy, aneurysms, and muscle cramps (HANAC) [MIM:611773]. The clinical renal manifestations include hematuria and bilateral large cysts. Histologic analysis revealed complex bas

**Subcellular Location :** Secreted, extracellular space, extracellular matrix, basement membrane .

**Expression :** Highly expressed in placenta.

## Products Images




Western Blot analysis of Hela MCF-7 U2OS 293T KB 293T VEC cells using Collagen IV Polyclonal Antibody diluted at 1:800. Secondary antibody(catalog#:RS0002) was diluted at 1:20000