Best Tools for immunology Research

Collagen IV (PT0131R) PT® Rabbit mAb

Catalog No :	YM8073
Reactivity :	Human;
Applications :	WB;IHC;IF;IP;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 Type IV
Human Gene Id :	1282
Human Swiss Prot No :	P02462
Specificity :	endogenous
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, rabbit, IgG, Kappa
Dilution :	IHC 1:200-1000,WB 1:1000-5000,IF 1:200-1000,ELISA 1:5000-20000,IP 1:50-200
Purification :	Protein A
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	160kD
Observed Band :	200kD

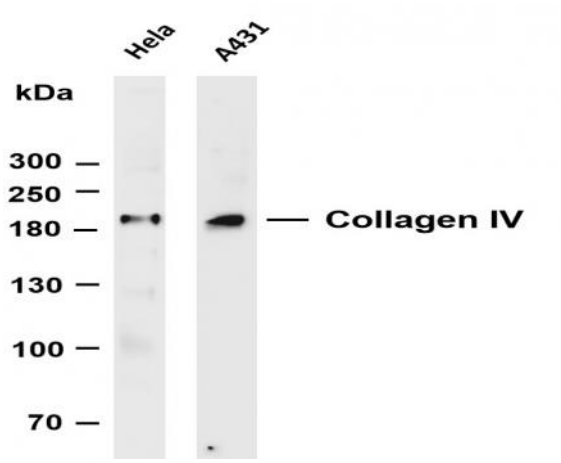
Background : This gene encodes a type IV collagen alpha protein. Type IV collagen proteins are integral components of basement membranes. This gene shares a bidirectional promoter with a paralogous gene on the opposite strand. The protein consists of an amino-terminal 7S domain, a triple-helix forming 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

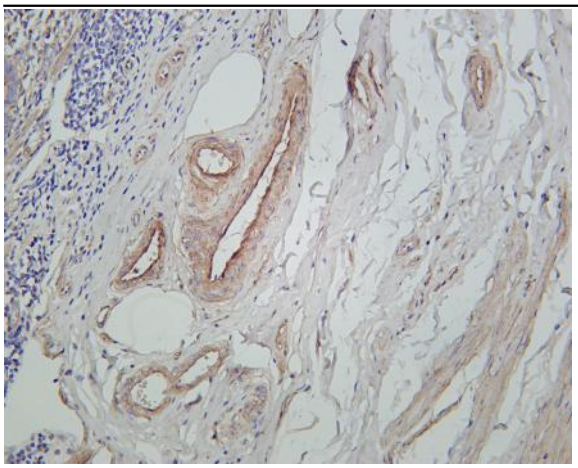
Subcellular Location : Cytoplasmic

Expression : Highly expressed in placenta.

Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Collagen IV (PT0131R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: A431 Predicted band size: 160kDa Observed band size: 200kDa



Human appendix was stained with Anti-Collagen IV (PT0131R) rabbit antibody