Best Tools for immunology Research

COL4A1 Polyclonal Antibody

Catalog No :	YT1024
Reactivity :	Human;Mouse
Applications :	WB;IHC;IF;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 alpha-1(IV) chain
Human Gene Id :	1282
Human Swiss Prot No :	P02462
Mouse Gene Id :	12826
Mouse Swiss Prot No :	P02463
Immunogen :	The antiserum was produced against synthesized peptide derived from human Collagen IV. AA range:11-60
Specificity :	COL4A1 Polyclonal Antibody detects endogenous levels of COL4A1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200
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 : 160kD

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

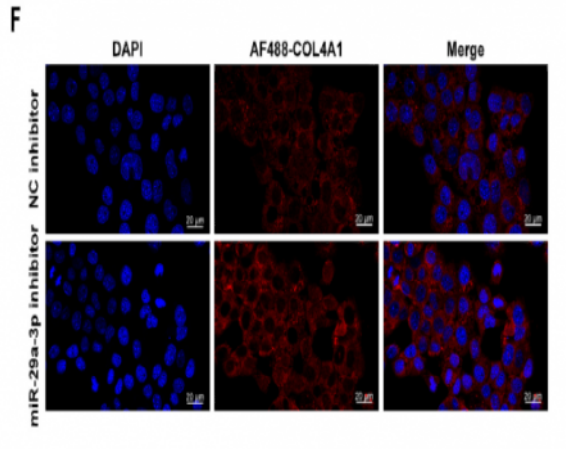
Background : This gene encodes a type IV collagen alpha protein. Type IV collagen proteins are integral components of basement membranes. This gene shares a bidirectional promoter with a paralogous gene on the opposite strand. The protein consists of an amino-terminal 7S domain, a triple-helix forming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

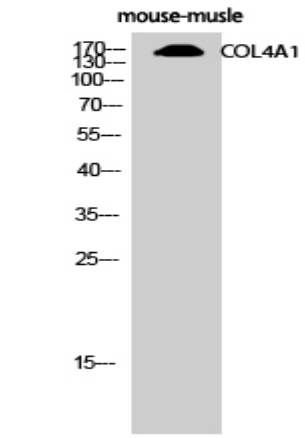
Subcellular Location : Secreted, extracellular space, extracellular matrix, basement membrane .

Expression : Highly expressed in placenta.

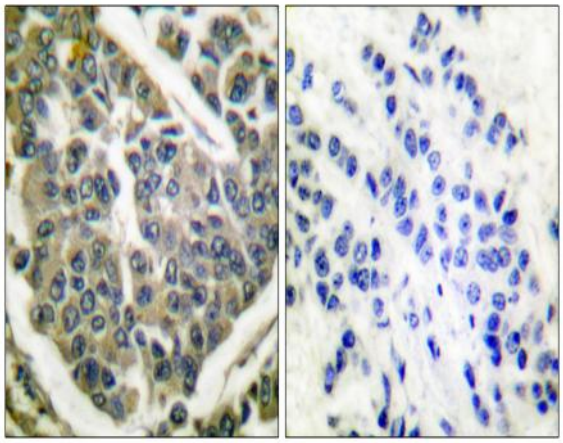
Products Images



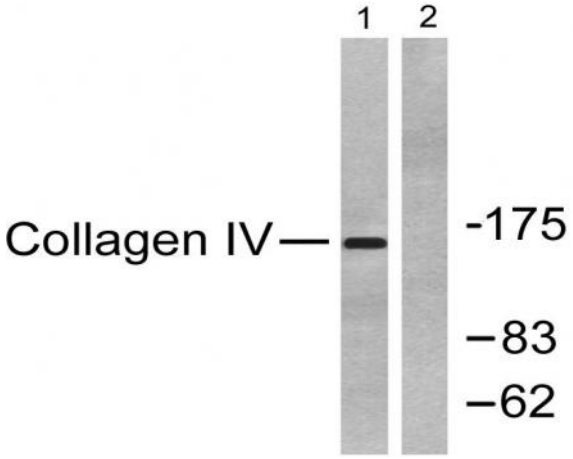
Prenatal bisphenol S exposure induces hepatic lipid deposition in male mice offspring through downregulation of adipose-derived exosomal miR-29a-3p JOURNAL OF HAZARDOUS MATERIALS Guizhen Du IF Mouse AML12 hepatocytes



Western Blot analysis of mouse-musle cells using COL4A1 Polyclonal Antibody diluted at 1:500



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Collagen IV Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa cells, using Collagen IV Antibody. The lane on the right is blocked with the synthesized peptide.