



COL4A1 Polyclonal Antibody

Catalog No	YP-Ab-16983
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	COL4A1
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	arresten;Collagen alpha 1(IV) chain;Collagen alpha-1(IV) chain;Collagen Type IV;Collagen IV;COL4A1
Observed Band	160kD
Calculated Molecular Weight	160kD
Cell Pathway	Secreted, extracellular space, extracellular matrix, basement membrane .
Tissue Specificity	Highly expressed in placenta.
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

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 perlecan, 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],

matters needing attention

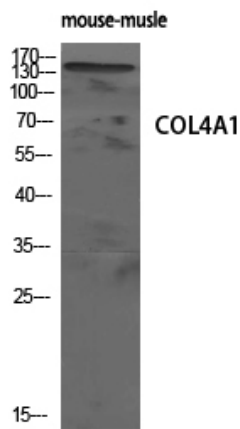
Avoid repeated freezing and thawing!

Usage suggestions

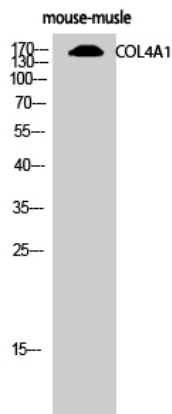
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



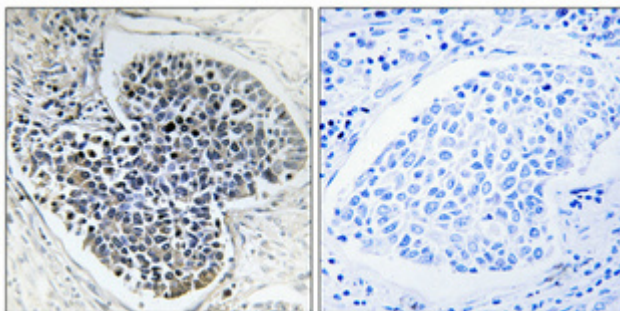
Products Images



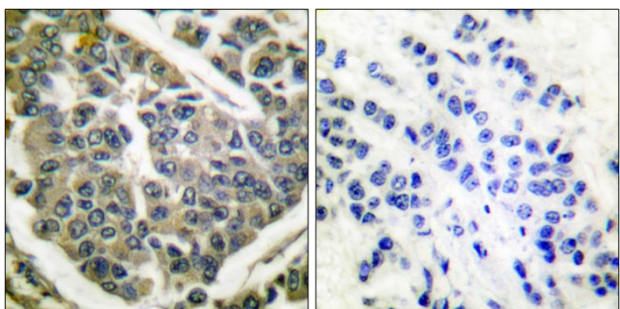
Western Blot analysis of mouse-muscle cells using COL4A1 Polyclonal Antibody diluted at 1:500



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



Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



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.

