



Collagen Type IV mouse mAb(ABT165)

Catalog No	YP-Ab-15654
Isotype	IgG
Reactivity	Human; Predict react with Mouse
Applications	IHC, WB
Gene Name	COL4A1
Immunogen	Synthesized peptide derived from human Collagen Type IV
Specificity	The antibody can specifically recognize human Collagen Type IV protein, collagen types I, II, III and V do not respond to the antibody.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.31% sodium azide.
Source	Mouse, Monoclonal/IgG2b, kappa
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	WB 1:1000-2000; IHC-p 1:100-500, IF 1:100-500
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	COL4; Collagen Type IV; COL4A 4; collagen; type IV; alpha 4; Collagen IV; COL4A1; Collagen alpha-1(IV) chain [Cleaved into: Arresten]
Observed Band	
Calculated Molecular Weight	
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],

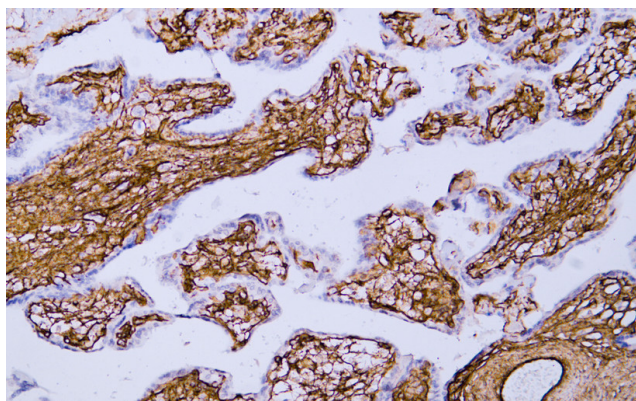
matters needing attention

Avoid repeated freezing and thawing!

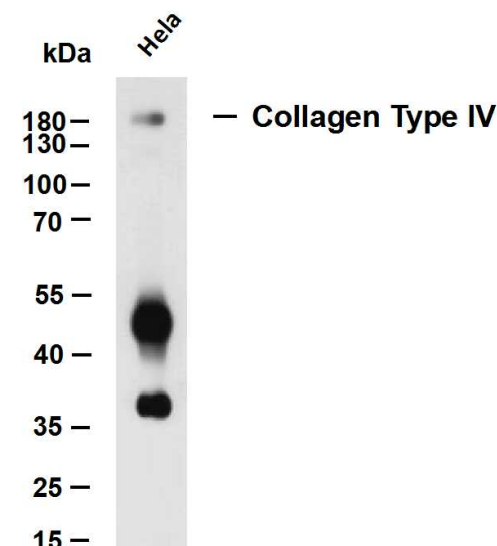
Usage suggestions

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

Products Images



Human placenta tissue was stained with Anti-Collagen Type IV (ABT165) Antibody



Hela whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-type IV (ABT165) antibody. The HRP-conjugated Goat anti-Mouse IgG (H + L) antibody was used to detect the antibody. Lane 1: Hela Predicted band size: 161kDa Observed band size: 180, 50, 37kDa