abcam

Product datasheet

Anti-COL4A3 antibody ab85103

面偽粉 1

医薬用外毒物

製品の概要

製品名 Anti-COL4A3 antibody

製品の詳細 Rabbit polyclonal to COL4A3

由来種 Rabbit

 アプリケーション
 適用あり: IHC-P

 種交差性
 交差種: Human

免疫原 Synthetic peptide within Human COL4A3 aa 1401-1470 (C terminal). The exact sequence is

proprietary. Sequence:

TPGPAGEKGNKGSKGEPGPAGSDGLPGLKGKRGDSGSPATWT

TRGFVFTR HSQTTAIPSCPEGTVPLYSG

Run BLAST with
Run BLAST with

ポジティブ・コントロール

特記事項

Human kidney

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Lyophilized:Reconstitute in 200ul sterile water.

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー pH: 7.20

Preservative: 0.02% Sodium azide

Constituents: 2% BSA, 0.184% Tris glycine

精製度 Immunogen affinity purified

ポリ/モノ ポリクローナル

アイソタイプ lgG

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Abpromise保証は、次のテスト済みアプリケーションにおけるab85103の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/50 - 1/200.

ターゲット情報

機能

Type IV collagen is the major structural component of glomerular basement membranes (GBM), forming a 'chicken-wire' meshwork together with laminins, proteoglycans and entactin/nidogen. Tumstatin, a cleavage fragment corresponding to the collagen alpha 3(IV) NC1 domain, possesses both anti-angiogenic and anti-tumor cell activity; these two anti-tumor properties may be regulated via RGD-independent ITGB3-mediated mechanisms.

組織特異性

Alpha 3 and alpha 4 type IV collagens are colocalized and present in kidney, eye, basement membranes of lens capsule, cochlea, lung, skeletal muscle, aorta, synaptic fibers, fetal kidney and fetal lung. PubMed:8083201 reports similar levels of expression of alpha 3 and alpha 4 type IV collagens in kidney, but PubMed:7523402 reports that in kidney levels of alpha 3 type IV collagen are significantly lower than those of alpha 4 type IV collagen. According to PubMed:8083201, alpha 3 type IV collagen is not detected in heart, brain, placenta, liver, pancreas, extrasynaptic muscle fibers, endoneurial and perineurial nerves, fetal brain, fetal heart and fetal liver. According to PubMed:7523402, alpha 3 type IV collagen is strongly expressed in pancreas, neuroretina and calvaria and not expressed in adrenal, ileum and skin. Isoform 1 and isoform 3 are strongly expressed in kidney, lung, suprarenal capsule, muscle and spleen, in each of these tissues isoform 1 is more abundant than isoform 3. Isoform 1 and isoform 3 are expressed at low levels in artery, fat, pericardium and peripherical nerve, but not in placenta, mesangium, skin, pleura and cultured umbilical endothelial cells.

関連疾患

Note=Autoantibodies against the NC1 domain of alpha 3(IV) are found in Goodpasture syndrome, an autoimmune disease of lung and kidney.

Defects in COL4A3 are a cause of Alport syndrome autosomal recessive (APSAR) [MIM:203780]. APSAR is characterized by progressive glomerulonephritis, glomerular basement membrane defects, renal failure, sensorineural deafness and specific eye abnormalities (lenticonous and macular flecks). The disorder shows considerable heterogeneity in that families differ in the age of end-stage renal disease and the occurrence of deafness.

Defects in COL4A3 are a cause of benign familial hematuria (BFH) [MIM:141200]; also known as thin basement membrane nephropathy. BFH is characterized by persistent hematuria, an electron microscopically detectable thin glomerular basement membrane (GBM) and an autosomal dominant mode of inheritance. Renal function remains normal. In children, differentiation between BFH and AS can be difficult, because both disorders are manifested by persistent hematuria and thin GBM at that age.

Defects in COL4A3 are a cause of Alport syndrome autosomal dominant (APSAD) [MIM:104200]. Alport syndrome is characterized by progressive glomerulonephritis, glomerular basement membrane defects, renal failure, sensorineural deafness and specific eye abnormalities (lenticonous and macular flecks). The disorder shows considerable heterogeneity in that families differ in the age of end-stage renal disease and the occurrence of deafness.

Belongs to the type IV collagen family.

配列類似性

Contains 1 collagen IV NC1 (C-terminal non-collagenous) domain.

Alpha chains of type IV collagen have a non-collagenous domain (NC1) at their C-terminus, frequent interruptions of the G-X-Y repeats in the long central triple-helical domain (which may

cause flexibility in the triple helix), and a short N-terminal triple-helical 7S domain.

翻訳後修飾 Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all

of the chains.

Isoform 2 contains an additional N-linked glycosylation site.

Type IV collagens contain numerous cysteine residues which are involved in inter- and intramolecular disulfide bonding. 12 of these, located in the NC1 domain, are conserved in all known type IV collagens.

The trimeric structure of the NC1 domains is stabilized by covalent bonds between Lys and Met residues.

Phosphorylated by the Goodpasture antigen-binding protein/COL4A3BP.

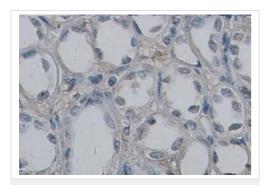
細胞内局在 Secreted > extracellular space > extracellular matrix > basement membrane. Colocalizes with

COL4A4 and COL4A5 in GBM, tubular basement membrane (TBM) and synaptic basal lamina

(BL).

画像

ドメイン



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-COL4A3 antibody (ab85103) ab85103 at 1/100 dilution staining COL4A3 in formalin-fixed, paraffin-embedded human kidney cells by immunohistochemistry.

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