abcam

Product datasheet

Anti-Vinculin antibody [SP117] - C-terminal ab111004

ועלשעבע RabMAb

画像数 13

製品の概要

製品名 Anti-Vinculin antibody [SP117] - C-terminal

製品の詳細 Rabbit monoclonal [SP117] to Vinculin - C-terminal

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: Rat, Human

交差が予測される動物種: Mouse, Chicken, Dog, Pig 4

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール IHC-P: Human heart, cerebellum, skeletal muscle, prostate, colon, small intestine, stomach,

bladder, breast and breast adenocarcinoma tissue, rat colon.

特記事項 This product is FOR RESEARCH USE ONLY. For commercial use, please contact

partnerships@abcam.com.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

バッファー pH: 7.60

> Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA

Protein A/G purified 精製度

Purified from TCS by Protein A/G. 特記事項(精製)

ポリ/モノ モノクローナル

クローン名 SP117

アイソタイプ lgG

アプリケーション

The Abpromise guarantee

Abpromise保証は、次のテスト済みアプリケーションにおけるab111004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		1/100. Boil tissue section in citrate buffer pH 6.0 for 10 minutes followed by cooling at room temperature for 20 minutes. Incubate with primary antibody for 10 minutes at room temperature.

ターゲット情報

機能

Actin filament (F-actin)-binding protein involved in cell-matrix adhesion and cell-cell adhesion. Regulates cell-surface E-cadherin expression and potentiates mechanosensing by the E-cadherin complex. May also play important roles in cell morphology and locomotion.

組織特異性

Metavinculin is muscle-specific.

関連疾患

Defects in VCL are the cause of cardiomyopathy dilated type 1W (CMD1W) [MIM:611407]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.

Defects in VCL are the cause of cardiomyopathy familial hypertrophic type 15 (CMH15) [MIM:613255]. It is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death.

配列類似性

Belongs to the vinculin/alpha-catenin family.

ドメイン

Exists in at least two conformations. When in the closed, 'inactive' conformation, extensive interactions between the head and tail domains prevent detectable binding to most of its ligands. It takes on an 'active' conformation after cooperative and simultaneous binding of two different ligands. This activation involves displacement of the head-tail interactions and leads to a significant accumulation of ternary complexes. The active form then binds a number of proteins that have both signaling and structural roles that are essential for cell adhesion.

The N-terminal globular head (Vh) comprises of subdomains D1-D4. The C-terminal tail (Vt) binds F-actin and cross-links actin filaments into bundles. An intramolecular interaction between Vh and Vt masks the F-actin-binding domain located in Vt. The binding of talin and alpha-actinin to the D1 subdomain of vinculin induces a helical bundle conversion of this subdomain, leading to the disruption of the intramolecular interaction and the exposure of the cryptic F-actin-binding domain of Vt. Vt inhibits actin filament barbed end elongation without affecting the critical concentration of actin assembly.

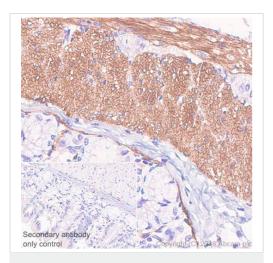
翻訳後修飾

Phosphorylated; on serines, threonines and tyrosines. Phosphorylation on Tyr-1133 in activated platelets affects head-tail interactions and cell spreading but has no effect on actin binding nor on localization to focal adhesion plaques.

Aceylated; mainly by myristic acid but also small amount of palmitic acid.

細胞内局在

Cytoplasm > cytoskeleton. Cell junction > adherens junction. Cell membrane. Cytoplasmic face of adhesion plaques. Recruitment to cell-cell junctions occurs in a myosin ll-dependent manner. Interaction with CTNNB1 is necessary for its localization to the cell-cell junctions.

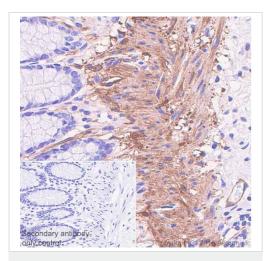


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody

[SP117] - C-terminal (ab111004)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat colon tissue sections labeling Vinculin with ab111004 at 1/100 dilution (1.84 µg/ml). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Goat Anti-Rabbit & Mouse lgG (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on the smooth muscle in rat colon, performed on a Leica Biosystems BOND™ RX instrument.

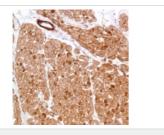
The section was incubated with ab111004 for 10 mins at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody

[SP117] - C-terminal (ab111004)

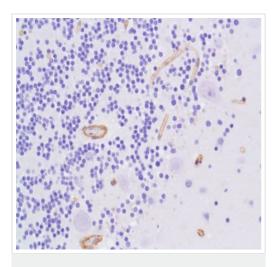
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human colon tissue sections labeling Vinculin with ab111004 at 1/100 dilution (1.84 µg/ml). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on the smooth muscle in human colon, performed on a Leica Biosystems BOND™ RX instrument. The section was incubated with ab111004 for 10 mins at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody

[SP117] - C-terminal (ab111004)

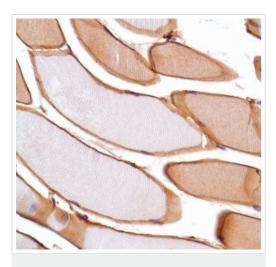
Formalin-fixed, paraffin-embedded human heart tissue stained for Vinculin using ab111004 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody

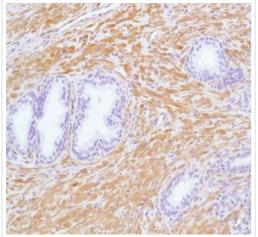
[SP117] - C-terminal (ab111004)

Formalin-fixed, paraffin-embedded human cerebellum tissue stained for Vinculin using ab111004 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody
[SP117] - C-terminal (ab111004)

Formalin-fixed, paraffin-embedded human skeletal muscle tissue stained for Vinculin using ab111004 at 1/100 dilution in immunohistochemical analysis.

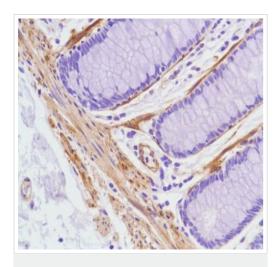


Immunohistochemistry (Formalin/PFA-fixed paraffin-

embedded sections) - Anti-Vinculin antibody

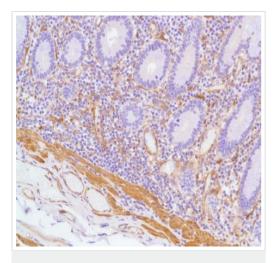
[SP117] - C-terminal (ab111004)

Formalin-fixed, paraffin-embedded human prostate tissue stained for Vinculin using ab111004 at 1/100 dilution in immunohistochemical analysis.



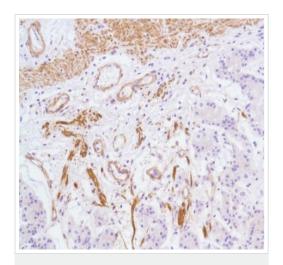
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody [SP117] - C-terminal (ab111004)

Formalin-fixed, paraffin-embedded human colon tissue stained for Vinculin using ab111004 at 1/100 dilution in immunohistochemical analysis.



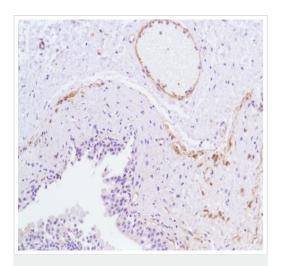
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody
[SP117] - C-terminal (ab111004)

Formalin-fixed, paraffin-embedded human small intestine tissue stained for Vinculin using ab111004 at 1/100 dilution in immunohistochemical analysis.



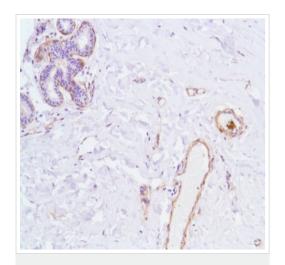
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody
[SP117] - C-terminal (ab111004)

Formalin-fixed, paraffin-embedded human stomach tissue stained for Vinculin using ab111004 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody
[SP117] - C-terminal (ab111004)

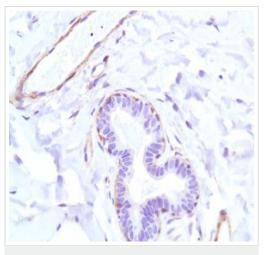
Formalin-fixed, paraffin-embedded human bladder tissue stained for Vinculin using ab111004 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody

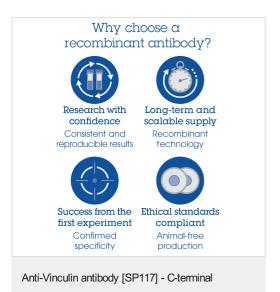
[SP117] - C-terminal (ab111004)

Formalin-fixed, paraffin-embedded human breast tissue stained for Vinculin using ab111004 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody
[SP117] - C-terminal (ab111004)

Formalin-fixed, paraffin-embedded human breast adenocarcinoma tissue stained for Vinculin using ab111004 at 1/100 dilution in immunohistochemical analysis.



(ab111004)

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