# abcam

### Product datasheet

# Anti-Vinculin antibody ab155120

5 References 画像数 4

製品の概要

製品名 Anti-Vinculin antibody

製品の詳細 Rabbit polyclonal to Vinculin

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, ICC/IF

種交差性 交差種: Mouse, Human

交差が予測される動物種: Rat, Chicken, Cow, Xenopus tropicalis

免疫原 Recombinant fragment within Human Vinculin aa 50-350. The exact immunogen sequence used

to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific

Support team to discuss your requirements.

Database link: **P18206-1** 

ポジティブ・コントロール NT2D1, U87-MG, MCF-7 and mouse brain tissue whole cell lysates, MCF-7 cells, Human

hepatoma tissue.

特記事項

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 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

**バッファー** pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

アイソタイプ IgG

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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ab155120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
WB		1/500 - 1/3000. Predicted molecular weight: 124 kDa.
IHC-P		1/100 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Alternative antigen retrieval buffer: Tris-EDTA buffer pH 8.
ICC/IF		1/100 - 1/1000.

#### ターゲット情報

Actin filament (F-actin)-binding protein involved in cell-matrix adhesion and cell-cell adhesion. 機能

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.

> 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.

Belongs to the vinculin/alpha-catenin family.

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.

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

関連疾患

配列類似性

ドメイン

翻訳後修飾

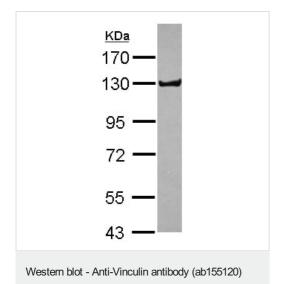
localization to focal adhesion plaques.

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 II-dependent manner. Interaction with CTNNB1 is necessary for its localization to the cell-cell junctions.

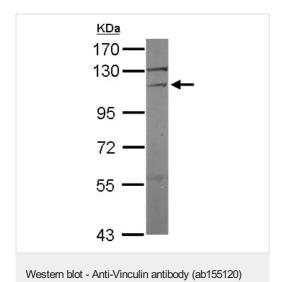
#### 画像



Anti-Vinculin antibody (ab155120) at 1/1000 dilution + NT2D1 whole cell lysate at 30  $\mu g$ 

Predicted band size: 124 kDa

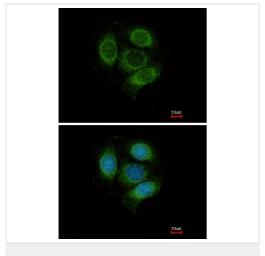
7.5% SDS PAGE



Anti-Vinculin antibody (ab155120) at 1/1000 dilution + Mouse brain whole cell lysate at 50  $\mu g$ 

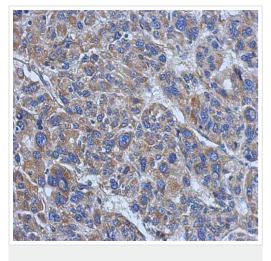
Predicted band size: 124 kDa

7.5% SDS PAGE



Immunofluorescent analysis of paraffin methanol-fixed MCF-7 cells, labeling Vinculin with ab155120 at 1/500 dilution. Lower panel shows costaining of ab155120 (green) with Hoechst 33342 (blue).

Immunocytochemistry/ Immunofluorescence - Anti-Vinculin antibody (ab155120)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vinculin antibody (ab155120)

Immunohistochemical analysis of paraffin-embedded Human hepatoma tissue, labeling Vinculin with ab155120 at 1/500 dilution.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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