


## Product datasheet

# Anti-Vinculin antibody ab91459

3 References [画像数 3](#)

### 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	<b>適用あり:</b> IHC-P, WB, IP
種交差性	<b>交差種:</b> Mouse, Human <b>交差が予測される動物種:</b> Rat, Rabbit, Horse, Chicken, Guinea pig, Cow, Turkey, Pig, Chimpanzee, Zebrafish, Rhesus monkey, Gorilla, Tilapia, Orangutan, Medaka fish, Platypus 
免疫原	Synthetic peptide corresponding to a region within C terminal amino acids 1016 - 1066 (SEQATEMLVH NAQNLMQSVK ETVREAEAAS IKIRTDAGFT LRWVRKTPWY Q) of Human Vinculin (NP_003364.1). <a href="#">Run BLAST with ExPASy</a> <a href="#">Run BLAST with NCBI</a>
ポジティブ・コントロール	HeLa, 293T or NIH3T3 whole cell lysate.

### 製品の特性

製品の状態	Liquid
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	Preservative: 0.09% Sodium Azide Constituents: Tris citrate/phosphate, pH 7-8
精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

### アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab91459** in the following tested applications.

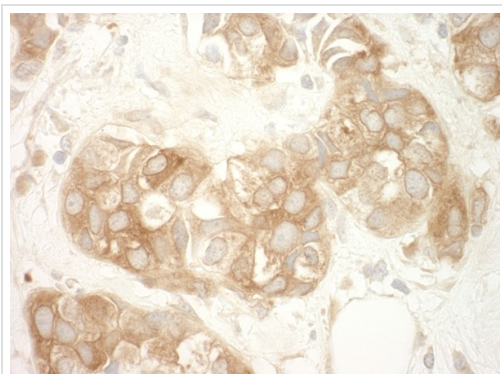
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
IHC-P		1/500 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/2000 - 1/10000. Predicted molecular weight: 124 kDa.
IP		Use at 5-15 µg/mg of lysate.

## ターゲット情報

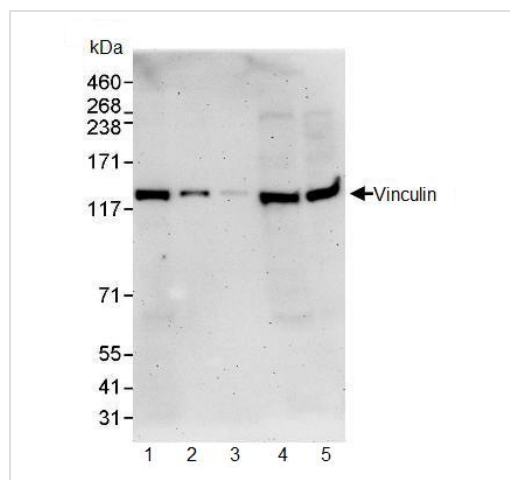
機能	Actin filament (F-actin)-binding protein involved in cell-matrix adhesion and cell-cell adhesion. Regulates cell-surface E-cadherin expression and potentiates mechanosensing by the E-cadherin complex. May also play important roles in cell morphology and locomotion.
組織特異性	Metavinculin is muscle-specific.
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 II-dependent manner. Interaction with CTNNB1 is necessary for its localization to the cell-cell junctions.

## 画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Vinculin antibody (ab91459)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labelling Vinculin with ab91459 at 1/1000 (1µg/ml).  
Detection: DAB.



Western blot - Anti-Vinculin antibody (ab91459)

**All lanes :** Anti-Vinculin antibody (ab91459) at 0.1 µg/ml

**Lane 1 :** HeLa whole cell lysate at 50 µg

**Lane 2 :** HeLa whole cell lysate at 15 µg

**Lane 3 :** HeLa whole cell lysate at 5 µg

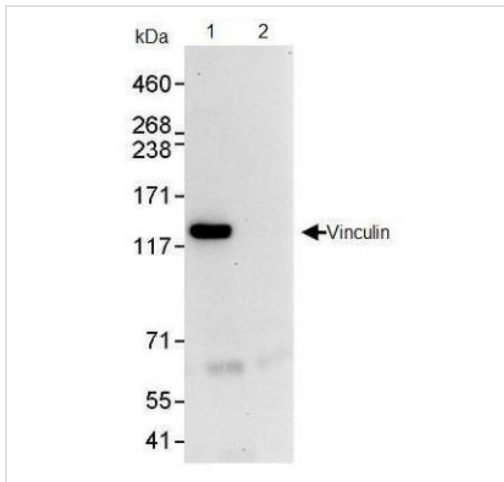
**Lane 4 :** 293T whole cell lysate at 50 µg

**Lane 5 :** Mouse NIH3T3 whole cell lysate at 50 µg

Developed using the ECL technique.

**Predicted band size:** 124 kDa

**Exposure time:** 3 minutes



Immunoprecipitation - Anti-Vinculin antibody  
(ab91459)

SSA1 was immunoprecipitated from 1mg HeLa whole cell lysate using 10µg ab91459. 20% of the immunoprecipitate was loaded per lane, and probed with ab91459 at 1µg/ml (lane 1) or a control IgG (lane2). Detection: chemoluminescence with an exposure time of 10 seconds.

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