# abcam

# Product datasheet

# Anti-CD36 antibody ab124515

★★★★★ 2 Abreviews 7 References 画像数 3

#### 製品の概要

製品名 Anti-CD36 antibody

製品の詳細 Rabbit polyclonal to CD36

由来種 Rabbit

アプリケーション 適用あり: IHC-P, WB

種交差性 交差種: Mouse

免疫原 Synthetic peptide corresponding to Mouse CD36 aa 400 to the C-terminus conjugated to keyhole

limpet haemocyanin.

(Peptide available as ab150445)

ポジティブ・コントロール This antibody gave a positive signal within WB in the following Mouse tissue lysates: Heart; P7

Adipose; Brown Adipose as well as Mouse spleen formalin fixed paraffin embedded tissue

section within IHC-P.

**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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**バッファー** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

精製度 Immunogen affinity purified

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ポリ/モノ ポリクローナル アイソタイプ

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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ab124515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		Use a concentration of 1 $\mu$ g/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	****(1)	Use a concentration of 1 µg/ml. Detects a band of approximately 88 kDa (predicted molecular weight: 53 kDa).

# ターゲット情報

#### 機能

Multifunctional glycoprotein that acts as receptor for a broad range of ligands. Ligands can be of proteinaceous nature like thrombospondin, fibronectin, collagen or amyloid-beta as well as of lipidic nature such as oxidized low-density lipoprotein (oxLDL), anionic phospholipids, long-chain fatty acids and bacterial diacylated lipopeptides. They are generally multivalent and can therefore engage multiple receptors simultaneously, the resulting formation of CD36 clusters initiates signal transduction and internalization of receptor-ligand complexes. The dependency on coreceptor signaling is strongly ligand specific. Cellular responses to these ligands are involved in angiogenesis, inflammatory response, fatty acid metabolism, taste and dietary fat processing in the intestine (Probable). Binds long-chain fatty acids and facilitates their transport into cells, thus participating in muscle lipid utilization, adipose energy storage, and gut fat absorption (By similarity) (PubMed:18353783, PubMed:21610069). In the small intestine, plays a role in proximal absorption of dietary fatty acid and cholesterol for optimal chylomicron formation, possibly through the activation of MAPK1/3 (ERK1/2) signaling pathway (By similarity) (PubMed:18753675). Involved in oral fat perception and preferences (PubMed:22240721, PubMed:25822988). Detection into the tongue of long-chain fatty acids leads to a rapid and sustained rise in flux and protein content of pancreatobiliary secretions (By similarity). In taste receptor cells, mediates the induction of an increase in intracellulare calcium levels by long-chain fatty acids, leading to the activation of the gustatory neurons in the nucleus of the solitary tract (By similarity). Important factor in both ventromedial hypothalamus neuronal sensing of long-chain fatty acid and the regulation of energy and glucose homeostasis (By similarity). Receptor for thombospondins, THBS1 and THBS2, mediating their antiangiogenic effects (By similarity). As a coreceptor for TLR4:TLR6 heterodimer, promotes inflammation in monocytes/macrophages. Upon ligand binding, such as oxLDL or amyloid-beta 42, interacts with the heterodimer TLR4:TLR6, the complex is internalized and triggers inflammatory response, leading to NF-kappa-B-dependent production of CXCL1, CXCL2 and CCL9 cytokines, via MYD88 signaling pathway, and CCL5 cytokine, via TICAM1 signaling pathway, as well as IL1B secretion, through the priming and activation of the NLRP3 inflammasome (By similarity) (PubMed:20037584). Selective and nonredundant sensor of microbial diacylated lipopeptide that signal via TLR2:TLR6 heterodimer, this cluster triggers signaling from the cell surface, leading to the NF-kappa-B-dependent production of TNF, via MYD88 signaling pathway and subsequently is targeted to the Golgi in a

lipid-raft dependent pathway (By similarity) (PubMed:16880211).

(Microbial infection) Directly mediates cytoadherence of Plasmodium falciparum parasitized

erythrocytes and the internalization of particles independently of TLR signaling.

**関連疾患** Platelet glycoprotein IV deficiency

Coronary heart disease 7

**配列類似性** Belongs to the CD36 family.

翻訳後修飾 N-glycosylated and O-glycosylated with a ratio of 2:1.

Ubiquitinated at Lys-469 and Lys-472. Ubiquitination is induced by fatty acids such as oleic acid

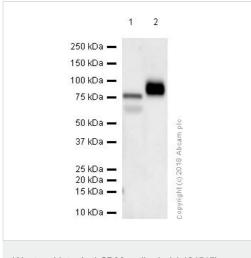
and leads to degradation by the proteasome (PubMed:21610069, PubMed:18353783). Ubiquitination and degradation are inhibited by insulin which blocks the effect of fatty acids

(PubMed:18353783).

**細胞内局在** Cell membrane. Membrane raft. Golgi apparatus. Apical cell membrane. Upon ligand-binding,

internalized through dynamin-dependent endocytosis.

# 画像



Western blot - Anti-CD36 antibody (ab124515)

All lanes: Anti-CD36 antibody (ab124515) at 1/5000 dilution

 $\textbf{Lane 1:} \ \ \textbf{Mouse platelet tissue lysate with } 5\% \ \ \ \textbf{NFDM/TBST}$ 

Lane 2: Mouse adipose tissue lysate with 5% NFDM/TBST

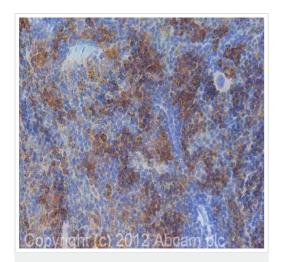
Lysates/proteins at 20 µg per lane.

# **Secondary**

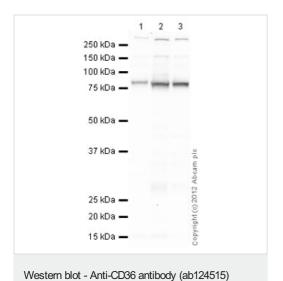
**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 53 kDa **Observed band size:** 75 kDa

Exposure time: 90 seconds



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD36 antibody (ab124515)



IHC image of ab124515 staining in mouse spleen formalin fixed paraffin embedded tissue section, performed on a Leica Bond<sup>TM</sup> system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab124515 ,1µg/ml, for 15 mins at room temperature. A goat anti-rabbit biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

All lanes: Anti-CD36 antibody (ab124515) at 1 µg/ml

Lane 1: Heart (Mouse) Tissue Lysate

Lane 2: P7 Adipose (Mouse) Tissue Lysate

Lane 3: Brown Adipose (Mouse) Tissue Lysate

Lysates/proteins at 10 µg per lane.

### **Secondary**

All lanes: Goat Anti-Rabbit lgG H&L (HRP) preadsorbed

(ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 53 kDa **Observed band size:** 88 kDa

Additional bands at: 150 kDa, 300 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 4 minutes

CD36 contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted. This blot was produced using a 4-12% Bis-

tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Bovine Serum Albumin before being incubated with ab124515 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.

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

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