# abcam

# Product datasheet

# Anti-CD36 antibody ab64014

★★★★★ 4 Abreviews 13 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

特異性 The immunogen used for this product shares 50% homology with CD36/SCARB1 and

CD36/SCARB2. Cross-reactivity with this protein has not been confirmed experimentally

アプリケーション **適用あり**: WB

種交差性 交差種: Mouse, Rat, Human

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

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

**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** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab64014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	<b>★★★☆☆</b> (3)	Use a concentration of 1 - 2 µg/ml. Detects a band of approximately 85 kDa (predicted molecular weight: 53 kDa). Abcam recommends using BSA as the blocking agent.

#### 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

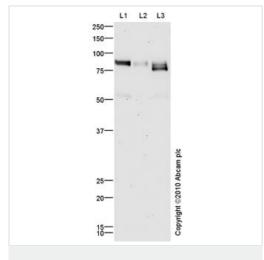
and leads to degradation by the proteasome (PubMed:21610069, PubMed:18353783). Ubiquitination and degradation are inhibited by insulin which blocks the effect of fatty acids

(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 (ab64014)

All lanes: Anti-CD36 antibody (ab64014) at 1 µg/ml

Lane 1: Human Platelet (Human adult normal cell line) Whole Cell

Lysate

Lane 2: Human spleen tissue lysate - total protein (ab29699)

Lane 3: Human adipose normal tissue lysate - total protein

(ab28980)

Lysates/proteins at 10 µg per lane.

# **Secondary**

**All lanes :** Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

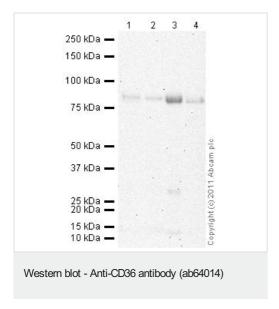
**Predicted band size:** 53 kDa **Observed band size:** 85 kDa

Additional bands at: 75 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 20 minutes

CD36 contains a number of potential glycosylation sites (SwissProt) which may explain the bands observed at 85 kDa. Abcam welcomes customer feedback.



**All lanes :** Anti-CD36 antibody (ab64014) at 2  $\mu$ g/ml (Blocked in 3% milk)

Lane 1 : Heart (Mouse) Tissue Lysate

Lane 2: Heart (Rat) Tissue Lysate

Lane 3 : Adult Mouse Brown Adipose Tissue Tissue Lysate

Lane 4: Adult Rat Brown Adipose Tissue Tissue Lysate

Lysates/proteins at 20 µg per lane.

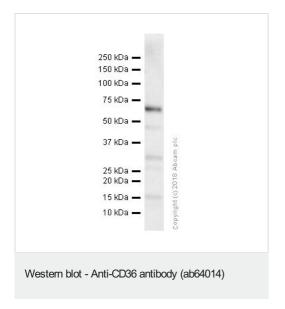
# **Secondary**

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

(ab97080) at 1/5000 dilution

Predicted band size: 53 kDa
Observed band size: 85 kDa

Exposure time: 20 minutes



Anti-CD36 antibody (ab64014) + HEK293 (human embryonic kidney epithelial cell) transfected with His-tagged human CD36 (30aa-439aa) expression vector, whole cell lysate at 20 µg with 5%

# **Secondary**

NFDM/TBST

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 53 kDa
Observed band size: 70 kDa

Exposure time: 3 minutes

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

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