

# Anti-CD36 antibody [EPR22509-40] ab252922

リコンビナント RabMAb

## 5 References [画像数 11](#)

### 製品の概要

製品名	Anti-CD36 antibody [EPR22509-40]
製品の詳細	Rabbit monoclonal [EPR22509-40] to CD36
由来種	Rabbit
特異性	CD36 expression is low in the normal brain (PMID: 27646002). Mouse species is recommended based on WB results, we do not guarantee IHC, ICC or FC for mouse. ab252922 doesn't work in mouse and rat liver as it detects no signal at CD36 position and a close nonspecific band.
アプリケーション	<b>適用あり:</b> WB, IHC-P, ICC/IF, Flow Cyt <b>適用なし:</b> IP
種交差性	<b>交差種:</b> Mouse, Rat, Human
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	WB: U937 whole cell lysate; rat spleen and fat tissue lysates; human lung and placenta tissue lysates, mouse white fat, mouse brown fat, mouse spleen, mouse brain. IHC-P: Human spleen and hepatocellular carcinoma tissue; rat stomach tissue. Flow cyt: THP-1 cells. ICC/IF: U937
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

### 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 long term. Avoid freeze / thaw cycle.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide

	Constituents: PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR22509-40
アイソタイプ	IgG

## 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ab252922の使用に適用されず**  
 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		1/1000. Detects a band of approximately 70-110 kDa (predicted molecular weight: 53 kDa).
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. IHC is recommend only for human and rat. Unsuitable for mouse.
ICC/IF		1/50. Unsuitable for mouse
Flow Cyt		1/50. Unsuitable for mouse.

**追加情報** Is unsuitable for IP.

## 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 intracellular 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 thrombospondins, 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.

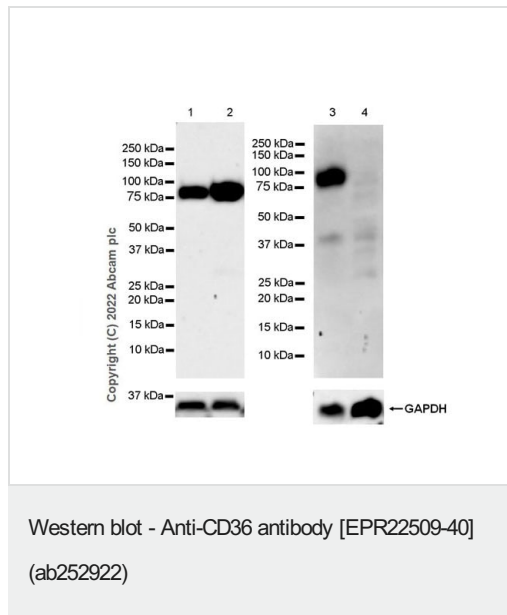
#### 翻訳後修飾

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



**All lanes** : Anti-CD36 antibody [EPR22509-40] (ab252922) at 1/1000 dilution

- Lane 1** : Mouse white fat tissue lysate
- Lane 2** : Mouse brown fat tissue lysate
- Lane 3** : Mouse spleen tissue lysate
- Lane 4** : Mouse brain tissue lysate

Lysates/proteins at 40 µg per lane.

#### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 53 kDa

**Observed band size:** 100,70 kDa

**Exposure time:** 81 seconds

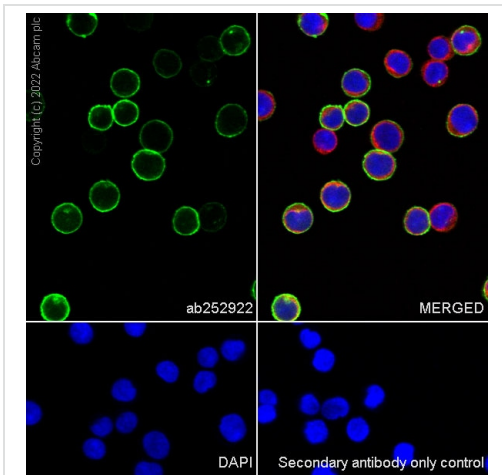
**Blocking and diluting buffer and concentration:** 5%

NFDM/TBST.

The molecular weight observed is due to glycosylation and consistent with what has been described in the literature (PMID:8798390, 15677505, 20637247, 8631821).

Low expression: brain (PMID: 27646002 )

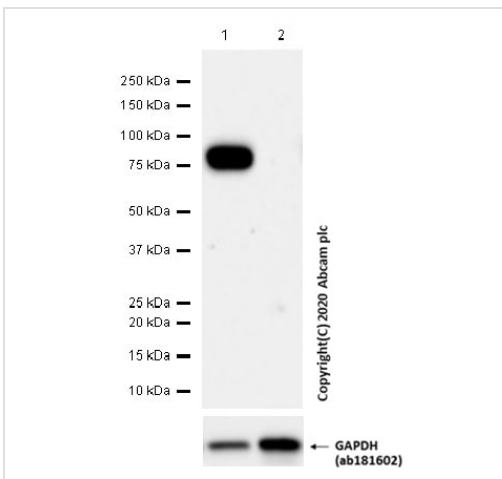
This blot was developed using a high sensitivity ECL substrate.



Immunocytochemistry/ Immunofluorescence - Anti-CD36 antibody [EPR22509-40] (ab252922)

Immunofluorescent analysis of 80% Methanol fixed 0.1% TritonX-100 permeabilised U937 (Human histiocytic lymphoma monocyte) cells labelling CD36 with ab252922 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (**ab150081**) secondary antibody at 1/1000 dilution. Confocal image showing membranous staining in U937 cells (Human histiocytic lymphoma monocyte) is observed. Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) was used to counterstain Alpha Tubulin at 1/200 dilution. The Nuclear counterstain is DAPI.

Secondary antibody only control: Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (**ab150081**) at 1/1000 dilution.



Western blot - Anti-CD36 antibody [EPR22509-40] (ab252922)

**All lanes :** Anti-CD36 antibody [EPR22509-40] (ab252922) at 1/1000 dilution

**Lane 1 :** Rat spleen tissue lysate

**Lane 2 :** Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/20000 dilution

**Predicted band size:** 53 kDa

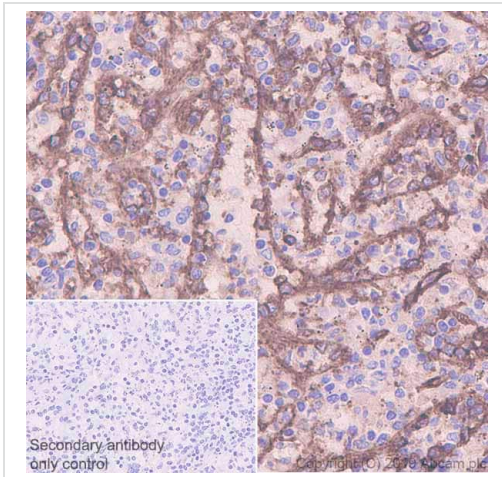
**Observed band size:** 70-110 kDa

**Exposure time:** 180 seconds

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM /TBST

CD36 expression is low in the normal brain (PMID:27646002)

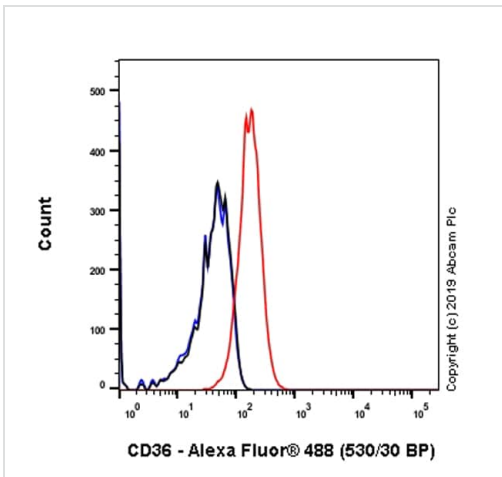


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD36 antibody [EPR22509-40] (ab252922)

Immunohistochemical analysis of [paraffin-embedded human spleen tissue labeling CD36 with ab252922 at 1/1000 dilution, followed by a Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on endothelial cells of human spleen (PMID:30047927,22777768) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).

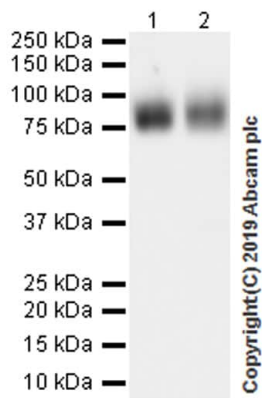


Flow Cytometry - Anti-CD36 antibody [EPR22509-40] (ab252922)

Flow cytometric analysis of THP-1 (human monocytic leukemia cell line) cells labeling CD36 with ab252922 at 1/50 dilution (red) compared with a Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue).

Goat Anti-Rabbit IgG Fc (Alexa Fluor® 488) preadsorbed (**ab150097**), at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells.



Western blot - Anti-CD36 antibody [EPR22509-40] (ab252922)

**All lanes** : Anti-CD36 antibody [EPR22509-40] (ab252922) at 1000 cells

**Lane 1** : Human placenta tissue lysate

**Lane 2** : Human lung tissue lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

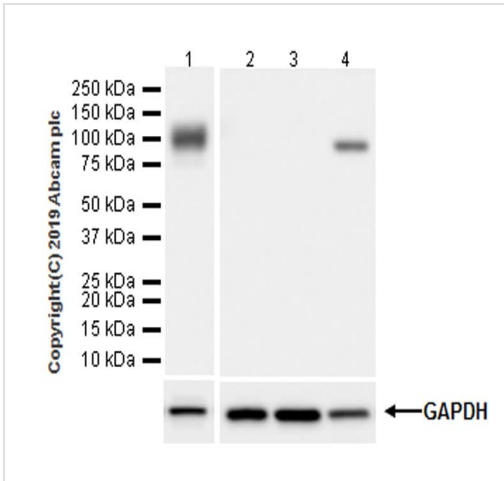
**All lanes** : VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at 1/4000 dilution

**Predicted band size:** 53 kDa

**Exposure time:** 3 seconds

Blocking and dilution buffer: 5% NFDm/TBST.

The molecular weight observed is due to glycosylation and consistent with what has been described in the literature (PMID:8798390,15677505,20637247).



Western blot - Anti-CD36 antibody [EPR22509-40] (ab252922)

**All lanes** : Anti-CD36 antibody [EPR22509-40] (ab252922) at 1/1000 dilution

**Lane 1** : U937 (human histiocytic lymphoma cell line) whole cell lysate

**Lane 2** : Ramos (human Burkitt's lymphoma cell line) whole cell lysate

**Lane 3** : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate

**Lane 4** : Rat spleen tissue lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

**Predicted band size:** 53 kDa

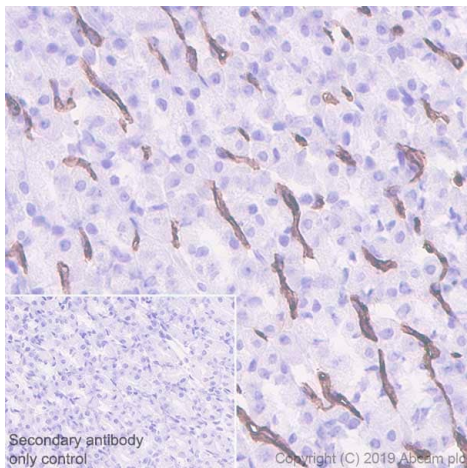
**Observed band size:** 70-110 kDa

**Exposure time:** 8 seconds

Blocking and dilution buffer: 5% NFDm/TBST.

**Negative control:** Ramos, Jurkat (PMID: 27956597,10744776)

The molecular weight observed is due to glycosylation and consistent with what has been described in the literature (PMID:8798390,15677505,20637247, 8631821).

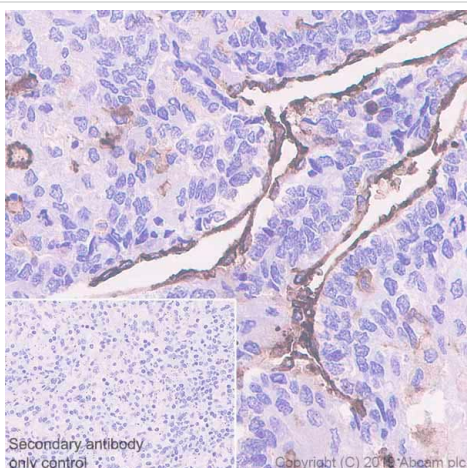


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD36 antibody [EPR22509-40] (ab252922)

Immunohistochemical analysis of paraffin-embedded rat stomach tissue labeling CD36 with ab252922 at 1/1000 dilution, followed by a Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on endothelial cells of rat stomach. (PMID:30047927,22777768) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).



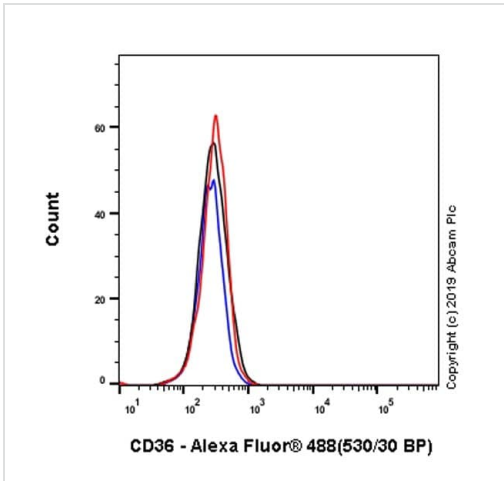
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD36 antibody [EPR22509-40] (ab252922)

Immunohistochemical analysis of paraffin-embedded human hepatocellular tissue labeling CD36 with ab252922 at 1/1000 dilution, followed by a Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on endothelial cells of human hepatocellular carcinoma (PMID:30047927,22777768) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).





Flow Cytometry - Anti-CD36 antibody [EPR22509-40] (ab252922)

Flow cytometric analysis of Ramos (human Burkitt's lymphoma B lymphocyte) cells labeling CD36 with ab252922 at 1/50 dilution (red) compared with a Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue).

Goat Anti-Rabbit IgG Fc (Alexa Fluor® 488) preadsorbed (**ab150097**), at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells.

**Negative control:** Ramos (PMID: 10744776).

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-CD36 antibody [EPR22509-40] (ab252922)

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

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