

Product datasheet

Anti-CD36 antibody [EPR22512-58] ab252923

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [1 References](#) [7 Images](#)

Overview

Product name	Anti-CD36 antibody [EPR22512-58]
Description	Rabbit monoclonal [EPR22512-58] to CD36
Host species	Rabbit
Specificity	The mouse and rat recommendation are based on the IHC results. We do not guarantee WB for mouse and rat.
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt, ICC/IF or IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: U937 whole cell lysate; rat spleen tissue lysate; human placenta, lung and breast cancer tissue lysates. IHC-P: Human liver tissue; mouse spleen tissue; rat stomach tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR22512-58
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab252923 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 70-110 kDa (predicted molecular weight: 53 kDa). The mouse and rat recommendation are based on the IHC results. We do not guarantee WB for mouse and rat.
IHC-P	★★★★★ (1)	1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt, ICC/IF or IP.

Target

Function 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.

Involvement in disease

Platelet glycoprotein IV deficiency
Coronary heart disease 7

Sequence similarities

Belongs to the CD36 family.

Post-translational modifications

N-glycosylated and O-glycosylated with a ratio of 2:1.

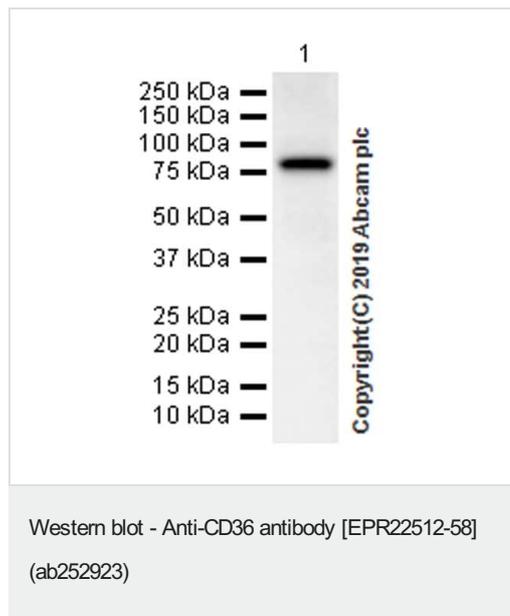
Ubiquitinated at Lys-469 and Lys-472. Ubiquitination is induced by fatty acids such as oleic acid and leads to degradation by the proteasome (PubMed:21610069, PubMed:18353783).

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

Cellular localization

Cell membrane. Membrane raft. Golgi apparatus. Apical cell membrane. Upon ligand-binding, internalized through dynamin-dependent endocytosis.

Images



Anti-CD36 antibody [EPR22512-58] (ab252923) at 1/1000 dilution
+ Rat spleen tissue lysate at 20 µg

Secondary

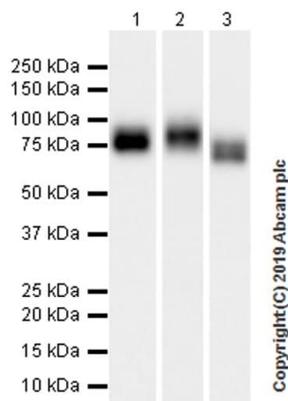
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 53 kDa

Exposure time: 81 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 [EPR22512-58] (ab252923)

All lanes : Anti-CD36 antibody [EPR22512-58] (ab252923) at 1/1000 dilution

Lane 1 : Human placenta tissue lysate

Lane 2 : Human lung tissue lysate

Lane 3 : Human breast cancer tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at 1/1000 dilution

Predicted band size: 53 kDa

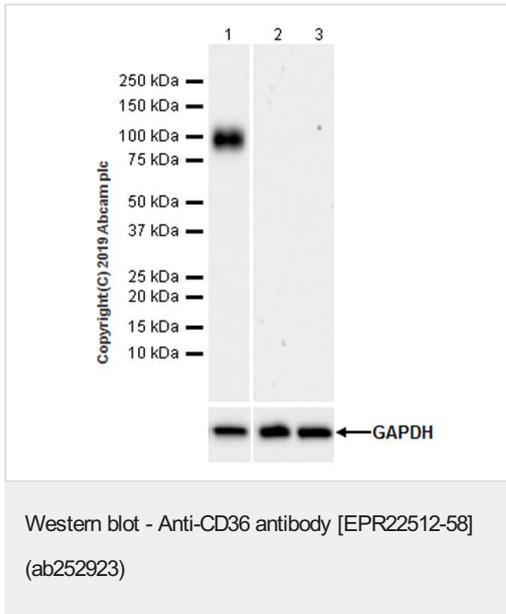
Observed band size: 70-110 kDa

Blocking and dilution buffer: 5% NFDm/TBST.

Exposure times.

Lane 1: 5.5 seconds; Lane 2: 15 seconds; Lane 3: 48 seconds.

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



All lanes : Anti-CD36 antibody [EPR22512-58] (ab252923) 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

Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 53 kDa

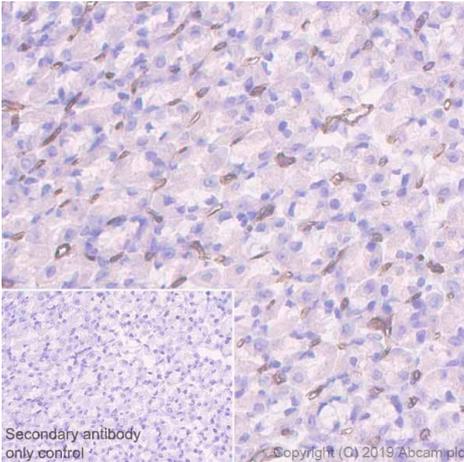
Observed band size: 70-110 kDa

Exposure time: 58 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).

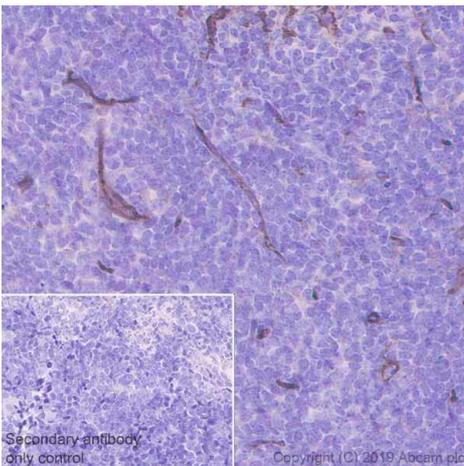


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD36 antibody [EPR22512-58] (ab252923)

Immunohistochemical analysis of paraffin-embedded rat stomach tissue labeling CD36 with ab252923 at 1/250 dilution, followed by 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).

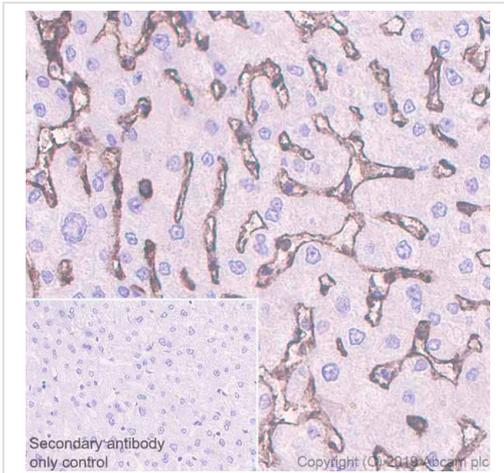


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD36 antibody [EPR22512-58] (ab252923)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling CD36 with ab252923 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on endothelial cells of mouse 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).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD36 antibody [EPR22512-58] (ab252923)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling CD36 with ab252923 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on endothelial cells of human liver (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).

Why choose a recombinant antibody?

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

Anti-CD36 antibody [EPR22512-58] (ab252923)

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

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