

Product datasheet

Anti-CD36 antibody [FA6-152] ab17044

★★★★☆ 2 Abreviews 30 References 3 图像

概述

产品名称	Anti-CD36抗体[FA6-152]
描述	小鼠单克隆抗体[FA6-152] to CD36
宿主	Mouse
经测试应用	适用于: Blocking, Functional Studies, IHC-Fr, Flow Cyt 不适用于: IHC-P or WB
种属反应性	与反应: Rat, Human
免疫原	20-weeks-old fetal erythrocytes.
阳性对照	Flow cytometry: THP-1 cells. HEL cells
常规说明	We have data from customer abReviews and publications indicating that this antibody is capable of detecting CD36 via western blot. However, based on customer feedback of difficulties and extensive troubleshooting using this antibody in western blot, we are removing WB as a tested application and recommend ab133625 as an alternative for use in this application.

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	Constituents: PBS, 0.1% BSA
纯度	Protein G purified
纯化说明	0.2 µm filtered
克隆	单克隆
克隆编号	FA6-152
同种型	IgG1

应用

Our [Abpromise guarantee](#) covers the use of **ab17044** in the following tested applications.

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

应用	Ab评论	说明
Blocking		Use at an assay dependent concentration. Blocks collagen/thrombospondin binding.
Functional Studies		Use at an assay dependent concentration.
IHC-Fr	★★★★☆	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
应用说明		Is unsuitable for IHC-P or WB.
靶标		
功能		<p>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 pancreaticobiliary 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).</p> <p>(Microbial infection) Directly mediates cytoadherence of Plasmodium falciparum parasitized erythrocytes and the internalization of particles independently of TLR signaling.</p>
疾病相关		<p>Platelet glycoprotein IV deficiency Coronary heart disease 7</p>

序列相似性

Belongs to the CD36 family.

翻译后修饰

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

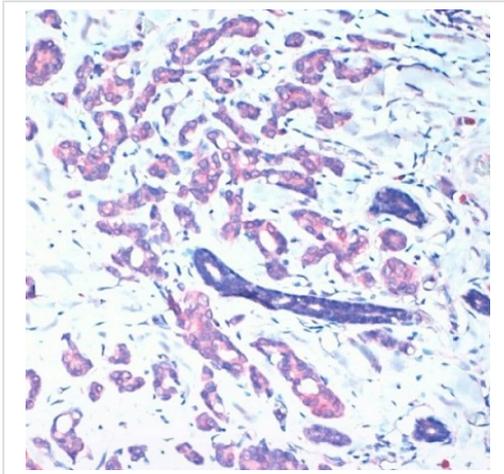
Ubiquitinated at Lys-469 and Lys-472. Ubiquitination is induced by fatty acids such as oleic acid and leads to degradation by the proteasome (PubMed:21610069, PubMed:18353783).

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

细胞定位

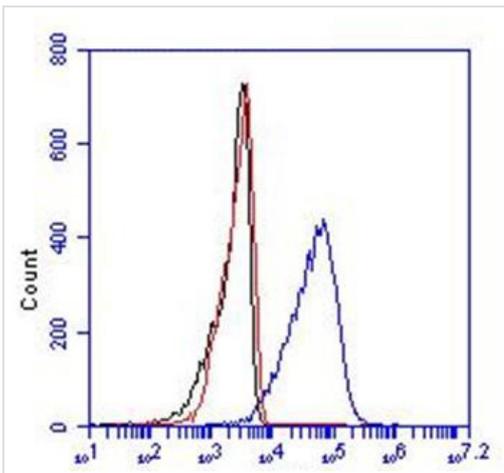
Cell membrane. Membrane raft. Golgi apparatus. Apical cell membrane. Upon ligand-binding, internalized through dynamin-dependent endocytosis.

图片



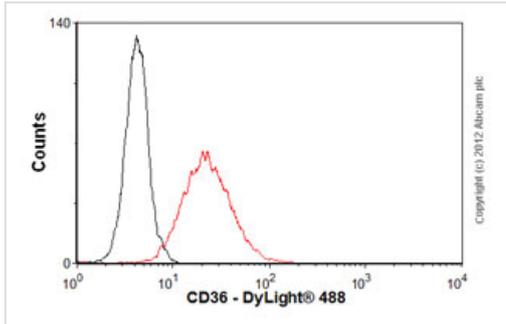
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) of human breast carcinoma stained for CD36 with ab17044 at 20 $\mu\text{g/ml}$

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD36 antibody [FA6-152] (ab17044)



Detection of CD36 in THP-1 cells. Red, black and blue line represent the isotype control, cells only and ab17044 at 10 $\mu\text{g/ml}$, respectively.

Flow Cytometry - Anti-CD36 antibody [FA6-152] (ab17044)



Flow Cytometry - Anti-CD36 antibody [FA6-152] (ab17044)

Overlay histogram showing THP1 cells stained with ab17044 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab17044, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive result in 80% methanol (5 min) fixed THP1 cells used under the same conditions.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

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