OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AR51965PU-S

CD36 (30-439, His-tag) Mouse Protein

Product data:

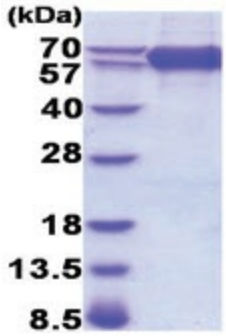
Product Type:	Recombinant Proteins
Description:	CD36 (30-439, His-tag) mouse protein, 50 µg
Species:	Mouse
Expression Host:	Insect
Expression cDNA Clone or AA Sequence:	ADPGDMLIEK TIKREVVLEE GTTAFKNWVK TGTTVYRQFW IFDVQNPDDV AKNSSKIKVK QRGPYTYRVR YLAKENITQD PEDHTVSFVQ PNGAIFEPSL SVGTEDDNFT VLNLAVAAAP HIYQNSFVQV VLNSLIKKSK SSMFQTRSLK ELLWGYKDPF LSLVPYPIST TVGVFYPYND TVDGVYKVFN GKDNISKVAI IESYKGKRNL SYWPSYCDMI NGTDAASFPP FVEKSRTLRF FSSDICRSIY AVFGSEIDLK GIPVYRFVLP ANAFASPLQN PDNHCFCTEK VISNNCTSYG VLDIGKCKEG KPVYISLPHF LHASPDVSEP IEGLHPNEDE HRTYLDVEPI TGFTLQFAKR LQVNILVKPA RKIEALKNLK RPYIVPILWL NETGTIGDEK AEMFKTQVTG KIKHHHHHH
Tag:	His-tag
Predicted MW:	47.4 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: Phosphate Buffered Saline (pH 7.4) containing 10% glycerol.
Endotoxin:	< 1.0 EU per 1 microgram of protein (determined by LAL method)
Preparation:	Liquid purified protein
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_001153027
Locus ID:	12491
UniProt ID:	Q08857
Cytogenetics:	5 8.11 cM
Synonyms:	Glycoprotein IIIb, PAS IV, PAS-4, Thrombospondin receptor, GP3B, GP4

View online »

Summary:

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 (PubMed:7685021). 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) (PubMed:19847289, PubMed:20037584, PubMed:23395392). 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). 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:17507371, PubMed:18753675, PubMed:21610069). Involved in oral fat perception and preferences (PubMed:16276419). 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) (PubMed:16276419). 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 (PubMed:18162488). Important factor in both ventromedial hypothalamus neuronal sensing of long-chain fatty acid and the regulation of energy and glucose homeostasis (By similarity) (PubMed:23557700). Receptor for thombospondins, THBS1 and THBS2, mediating their antiangiogenic effects (PubMed:15748999). 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 (PubMed:20037584, PubMed:23812099). 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:15690042, PubMed:19847289).[UniProtKB/Swiss-Prot Function]

Product images:



15% SDS-PAGE (3ug)