

CD36 (D8L9T) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IHC-P	H Mk	Endogenous	70-110	Rabbit IgG	#P16671	948

Product Usage Information**Application**

Western Blotting
Immunohistochemistry (Paraffin)

Dilution

1:1000
1:100 - 1:400

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

For a carrier free (BSA and azide free) version of this product see product #39914.

Specificity/Sensitivity

CD36 (D8L9T) Rabbit mAb recognizes endogenous levels of total CD36 protein. This antibody also cross-reacts with an unidentified protein of 30 kDa.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val112 of human CD36 protein.

Background

CD36 is a class B scavenger receptor composed of short amino-terminal and carboxy-terminal cytoplasmic domains, two transmembrane domains, and a large glycosylated extracellular domain (1-4). The CD36 receptor has many diverse ligands and cellular functions and is expressed by multiple cell types, including monocytes, macrophages, platelets, endothelial cells, adipocytes, and some epithelial cells (1). Binding of thrombospondin-1 (TSP-1) to CD36 facilitates the inhibition of angiogenesis by TSP-1 (5). CD36 also binds lipids and enables their transport into cells (6). In macrophages, CD36 acts as a receptor for oxidized LDL (Ox-LDL) and is responsible for Ox-LDL internalization, which contributes to development of atherosclerosis (7). The CD36 receptor participates in the innate immune response by acting as a pattern recognition receptor for lipid components of bacterial cell walls and fungal beta-glucans (8,9). CD36 likely influences signaling by interacting with other cell surface receptors including TLRs, integrins, and tetraspanins (8,10,11). Phorbol 12-myristate 13-acetate (PMA)/ 12-O-tetradecanoylphorbol-13-acetate (TPA) induces CD36 expression in the THP-1 monocyte cell line (12).

Background References

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4. Endemann, G. et al. (1993) *J Biol Chem* 268, 11811-6.
5. Dawson, D.W. et al. (1997) *J Cell Biol* 138, 707-17.
6. Kim, Y.R. and Peterkofsky, B. (1997) *J Cell Biochem* 67, 338-52.
7. Nicholson, A.C. et al. (1995) *Arterioscler Thromb Vasc Biol* 15, 269-75.
8. Hoebe, K. et al. (2005) *Nature* 433, 523-7.
9. Means, T.K. et al. (2009) *J Exp Med* 206, 637-53.
10. Mattera, M.D. (1992) *RN* 55, 7.
11. Miao, W.M. et al. (2001) *Blood* 97, 1689-96.
12. Alessio, M. et al. (1996) *J Biol Chem* 271, 1770-5.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)

Cross-Reactivity Key

H: Human **Mk:** Monkey

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