CD36 (D8L9T) Rabbit mAb

For Research Use Only. Not For Use In Diagnostic Procedures.

**Applications**

<table>
<thead>
<tr>
<th>Species Cross-Reactivity*</th>
<th>Molecular Wt.</th>
<th>Isotype</th>
<th>Endogenous</th>
</tr>
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<tbody>
<tr>
<td>W, IHC-P</td>
<td>70-110 kDa</td>
<td>Rabbit IgG**</td>
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**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 (5). 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 monocytic cell line (12).

**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.

**Immunohistochemical analysis of paraffin-embedded human ovarian carcinoma using CD36 (D8L9T) Rabbit mAb.**

**Western blot analysis of extracts from various cell lines using CD36 (D8L9T) Rabbit mAb (upper) and β-Actin (D6A8) Rabbit mAb (lower).** Expression of CD36 was induced in the THP-1 cell line using TPA #4174 (80 nm, 16hrs).

**Recommended Antibody Dilutions:**

- Western blotting: 1:1000
- Immunohistochemistry (Paraffin): 1:200
- Unmasking buffer: SignalStain® Antibody Diluent #8112
- Antibody diluent: SignalStain® Boost (HRP, Rabbit) #8114

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.**

**Recommended Companion Products:**

- **Immunohistochemistry:**
  - SignalStain® Boost Detection reagent: SignalStain® Boost (HRP, Rabbit) #8114
  - Antibody diluent: SignalStain® Antibody Diluent #8112
  - Unmasking buffer: SignalStain® Antibody Diluent #8112

**For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com.**

**Background References:**


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

**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.

**Optimal IHC dilutions determined using SignalStain® Boost Detection Reagent.**

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For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com.
Immunohistochemical analysis of paraffin-embedded human adipocytes in breast carcinoma using CD36 (D8L9T) Rabbit mAb in the presence of control peptide (left) and antigen-specific peptide (right).

Immunohistochemical analysis of paraffin-embedded U-937 (left) and Jurkat (right) cell pellets using CD36 (D8L9T) Rabbit mAb.