



BMA BIOMEDICALS

Biotinylated Monoclonal Antibody To Rat MCL

Marker for Macrophage C-type Lectin

Rat macrophage C-type lectin (MCL; CLEC4D, CLECSF8) is expressed on monocytes and neutrophils as well as several tissue-resident macrophage populations. MCL associates with Macrophage Inducible C-type Lectin (Mincle) to form a heterodimeric functional surface receptor that signals through FcεR1γ and mediates phagocytosis upon receptor engagement. MCL, together with Mincle, is encoded by the antigen presenting cell lectin-like receptor gene complex (APLEC). The APLEC gene region is associated with rheumatoid arthritis in man and experimentally induced autoimmunity in rodents.

This antibody was produced in vitro from cell culture supernatant.

TECHNICAL AND ANALYTICAL CHARACTERISTICS

Product Number:	T-3038 (Lot 01PB1622)
Clone:	WEN42
Host species, isotype:	Mouse IgG2a
Quantity:	200µg
Format:	Affinity purified from cell culture supernatant, biotinylated, lyophilized, packaged under nitrogen. Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.05% (v/v) Kathon™ CG as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C from date of purchase. Avoid freeze-thaw cycles.
Applications:	Tested for immunohistochemistry (IHC); has been described to work in FACS and Western blots. Approximate working dilution for IHC: Frozen sections: 1µg/ml (1:400) Paraffin sections: 10µg/ml (1:40); pretreatment in microwave with citrate buffer for antigen retrieval is recommended Optimal dilutions should be determined by the end user. Suggested positive control: rat spleen. Please see www.bma.ch for protocols and general information.
Immunogen:	BWZ cells expressing a chimeric MCL construct
Protein database:	<u>rat-Q69FH1</u>
Antigen, epitope:	The antigen is located in the extracellular domain of MCL.

Antigen distribution:

Isolated cells: The antigen can be found on neutrophils and monocytes, as well as on resident peritoneal macrophages. It is absent from other blood cells, i.e. from T or B lymphocytes or NK cells.

Tissue sections: Distinct staining can be observed in the marginal zone, probably of marginal zone macrophages. Little or no staining can be observed in the white pulp.

Specificity:

Rat: monocytes and neutrophils, peritoneal macrophages.

Other: does not react with swine tissue.

Selected references

Lobato-Pascual A., Saether P.C., Dahle M.K., Gaustad P., Dissen E., Fossum S., Daws M.R.: Rat Macrophage C-type Lectin is an activating Receptor expressed by phagocytic cells. PLoS One 2013; 8(2): e57406

For in vitro research only. This product contains Kathon™ CG as a preservative.