

# **Anti-CD68 Antibody**

Catalog # ABO11324

# **Specification**

# **Anti-CD68 Antibody - Product Information**

Application WB, IHC-P
Primary Accession P34810
Host Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Macrosialin(CD68) detection. Tested with WB, IHC-P in Human.

## Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# **Anti-CD68 Antibody - Additional Information**

Gene ID 968

## **Other Names**

Macrosialin, Gp110, CD68, CD68

## **Calculated MW**

37408 MW KDa

## **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, By Heat<br/>blot, 0.1-0.5  $\mu$ g/ml, Human<br/>br>

# **Subcellular Localization**

Isoform Short: Cell membrane; Single-pass type I membrane protein.

## **Tissue Specificity**

Highly expressed by blood monocytes and tissue macrophages. Also expressed in lymphocytes, fibroblasts and endothelial cells. Expressed in many tumor cell lines which could allow them to attach to selectins on vascular endothelium, facilitating their dissemination to secondary sites. .

#### **Protein Name**

Macrosialin

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

#### **Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human CD68(341-354aa FCIIRRRPSAYQAL).



**Purification** 

Immunogen affinity purified.

**Cross Reactivity** 

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities**Belongs to the LAMP family.

# **Anti-CD68 Antibody - Protein Information**

### Name CD68

### **Function**

Could play a role in phagocytic activities of tissue macrophages, both in intracellular lysosomal metabolism and extracellular cell-cell and cell-pathogen interactions. Binds to tissue- and organ-specific lectins or selectins, allowing homing of macrophage subsets to particular sites. Rapid recirculation of CD68 from endosomes and lysosomes to the plasma membrane may allow macrophages to crawl over selectin-bearing substrates or other cells.

#### **Cellular Location**

[Isoform Short]: Cell membrane; Single-pass type I membrane protein

## **Tissue Location**

Highly expressed by blood monocytes and tissue macrophages. Also expressed in lymphocytes, fibroblasts and endothelial cells. Expressed in many tumor cell lines which could allow them to attach to selectins on vascular endothelium, facilitating their dissemination to secondary sites.

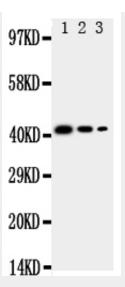
# **Anti-CD68 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

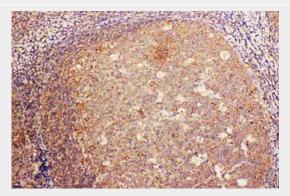
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **Anti-CD68 Antibody - Images**





Anti-CD68 antibody, ABO11324, Western blottingRecombinant Protein Detection Source: E.coli derived -recombinant Human CD68, 42.5KD(162aa tag+ T128-L354)Lane 1: Recombinant Human CD68 Protein 10ngLane 2: Recombinant Human CD68 Protein 5ngLane 3: Recombinant Human CD68 Protein 2.5ng



Anti-CD68 antibody, ABO11324, IHC(P)IHC(P): Human Tonsil Tissue

# **Anti-CD68 Antibody - Background**

CD68, cluster of differentiation, is a 110-kD transmembrane glycoprotein that is highly expressed by human monocytes and tissue macrophages. CD68 is a member of a family of hematopoietic mucin-like molecules that includes leukosialin/CD43 and stem cell antigen CD34. The CD68 gene is mapped to 17p13.1. Immunohistochemistry can be used to identify the presence of CD68, which is found in the cytoplasmic granules of a range of different blood cells. It is particularly useful as a marker for the various cells of the macrophage lineage, including monocytes, histiocytes, giant cells, Kupffer cells, and osteoclasts. This allows it to be used to distinguish diseases of otherwise similar appearance, such as the monocyte/macrophage and lymphoid forms of leukaemia(the latter being CD68 negative). Its presence in macrophages also makes it useful in diagnosing conditions related to proliferation or abnormality of these cells, such as malignant histiocytosis, histiocytic lymphoma, and Gaucher's disease.