

Basic Information

Product Name	Anti-CD68 Antibody	
Gene Name	CD68	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	mouse, rat	
Tested Application	WB, IHC, IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of mouse CD68, different from the related rat sequence by one amino acid.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	100 kDa	
Dilution Ratios	Western blot (WB): Immunohistochemistry (IHC): Immunofluorescence (IF): Flow Cytometry (Fixed): (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	1:500-2000 1:50-400 1:50-400 1:50-200

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

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.

Reference

Anti-CD68 Antibody 被引用在125文献中。

Selected Validation Data

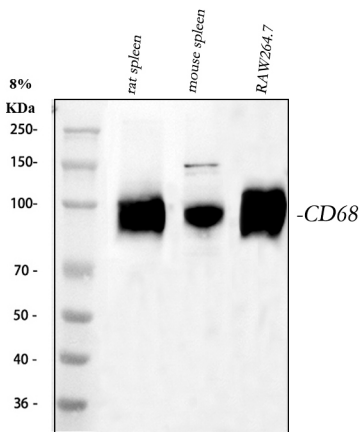


Figure 1. Western blot analysis of CD68 using anti-CD68 antibody (BA3638). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat spleen tissue lysates,

Lane 2: mouse spleen tissue lysates,

Lane 3: mouse RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-CD68 antigen affinity purified polyclonal antibody (BA3638) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus

Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CD68 at approximately 90-100 kDa. The expected band size for CD68 is at 37 kDa.

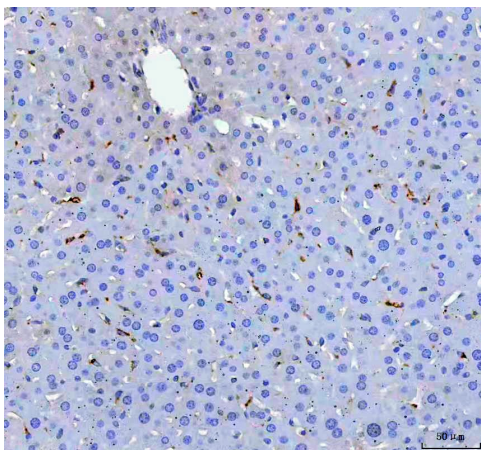


Figure 2. IHC analysis of CD68 using anti-CD68 antibody (BA3638). CD68 was detected in a paraffin-embedded section of mouse liver tissue. The tissue section was incubated with rabbit anti-CD68 Antibody (BA3638) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1022) as the chromogen.

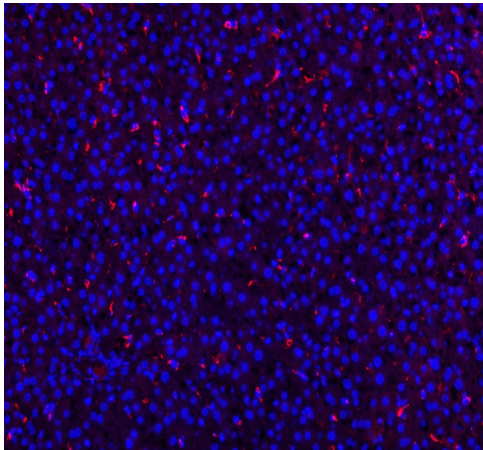


Figure 7. IF analysis of CD68 using anti-CD68 antibody (BA3638). CD68 was detected in a paraffin-embedded section of rat liver tissue. The tissue section was incubated with rabbit anti-CD68 Antibody (BA3638) at a dilution of 1:100. Cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1032) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

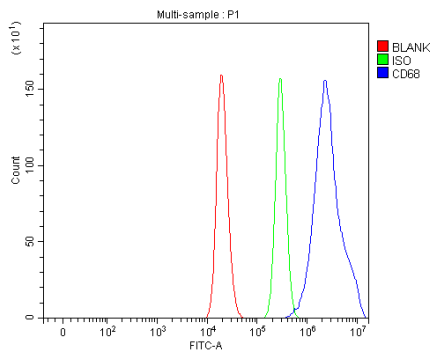


Figure 9. Flow Cytometry analysis of RAW264.7 cells using anti-CD68 antibody (BA3638). Overlay histogram showing RAW264.7 cells stained with BA3638 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-CD68 Antibody (BA3638, 1:100). DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.