

Anti-CD68 Antibody
Catalog # ABO10836**Specification**

Anti-CD68 Antibody - Product Information

Application	IHC
Primary Accession	P31996
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Macrosialin(CD68) detection. Tested with WB, IHC-P, IHC-F in Mouse;Rat.

Reconstitution

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

Anti-CD68 Antibody - Additional Information

Gene ID 12514

Other Names

Macrosialin, CD68, Cd68

Calculated MW

34818 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, By Heat

Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Mouse, Rat, -
Western blot, 0.1-0.5 µg/ml, Rat, Mouse

Subcellular Localization

Isoform Long: Endosome membrane; Single-pass type I membrane protein. Lysosome membrane; Single-pass type I membrane protein.

Tissue Specificity

Expressed in tissue macrophages and to a lesser extent in dendritic cells.

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 in the middle region of mouse CD68(312-326aa AFCITRRRQSTYQPL), different from the related rat sequence by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, 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 Long]: Endosome membrane; Single-pass type I membrane protein. Lysosome membrane; Single-pass type I membrane protein

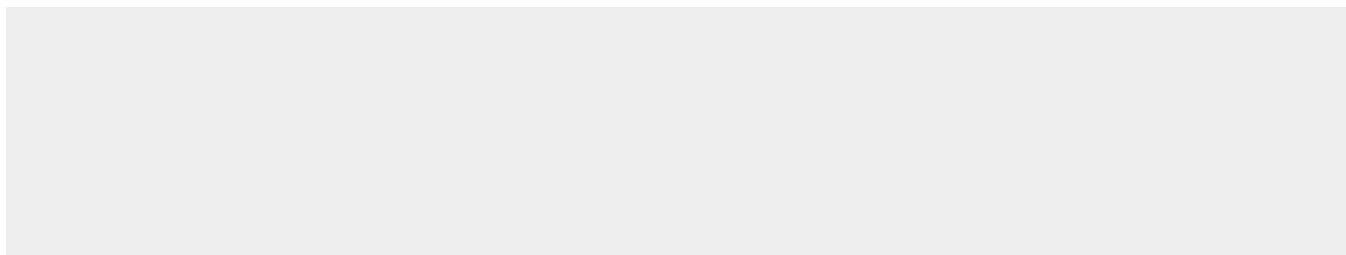
Tissue Location

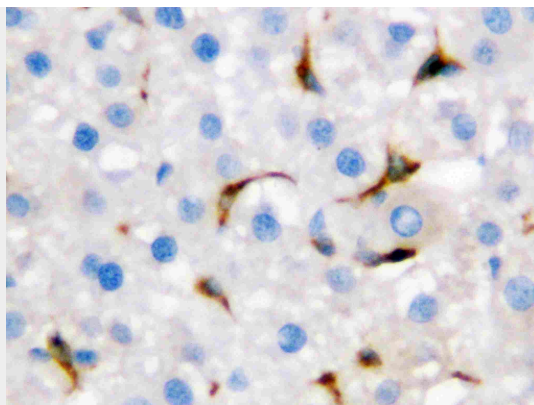
Expressed in tissue macrophages and to a lesser extent in dendritic cells

Anti-CD68 Antibody - Protocols

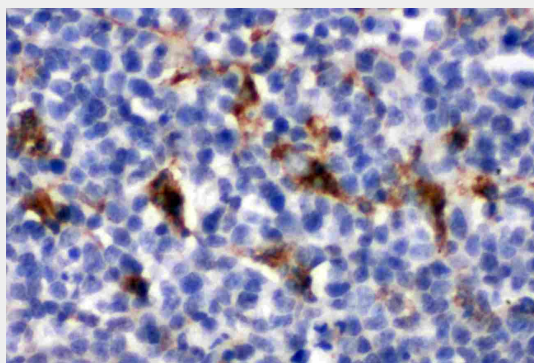
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

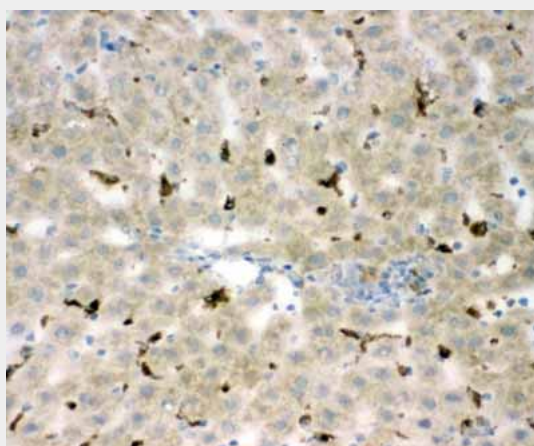
Anti-CD68 Antibody - Images



Anti-CD68 antibody, ABO10836, IHC(P)IHC(P): Rat Liver Tissue



Anti-CD68 antibody, ABO10836, IHC(P)IHC(P): Mouse Spleen Tissue



Anti-CD68 antibody, ABO10836, IHC(F)IHC(F): Rat Liver 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.