

Anti-CD68 (RABBIT) Antibody

CD68 Antibody Catalog # ASR5764

Specification

Anti-CD68 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate Unconjugated

Target Species
Reactivity
Mouse
Clonality
Application
Mouse
Polyclonal
WB, E, I, LCI

Application Note Anti-CD68 Antibody has been tested in

ELISA and Western Blot. Expect a band at ~34.8Da in western blot using appropriate

tissues and lysates. Positive control used: mouse heart and kidney in WB.

Physical State Liquid (sterile filtered)

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen CD68 affinity purified antibody was

prepared from whole rabbit serum

produced by repeated immunizations with a synthetic peptide corresponding to a near C-terminal region of mouse CD68.

Preservative 0.01% (w/v) Sodium Azide

Anti-CD68 (RABBIT) Antibody - Additional Information

Gene ID 12514

Other Names 12514

Purity

Anti-CD68 Antibody is directed against mouse CD68 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from mouse based on 100% homology for the immunogen sequence. Cross reactivity with Cd68 from other sources has not been determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.



Anti-CD68 (RABBIT) 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

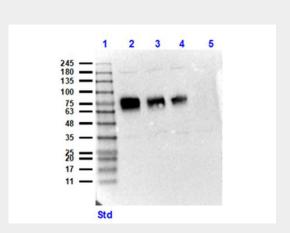
Expressed in tissue macrophages and to a lesser extent in dendritic cells

Anti-CD68 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-CD68 (RABBIT) Antibody - Images



Western Blot of Rabbit Anti-CD68 Antibody. Lane 1: Opal Prestained Molecular Weight Marker (p/n MB-210-0500). Lane 2: HeLa + Rec. CD68 (Baculo expressed) protein (10 μ g/0.05 μ g) [+]. Lane 3: HeLa + Rec. CD68 (Baculo expressed) protein (10 μ g/0.02 μ g) [+]. Lane 4: HeLa + Rec. CD68 (Baculo expressed) protein (10 μ g/0.01 μ g) [+]. Lane 5: HeLa whole cell lysate (p/n W09-000-364) (10 μ g) [-]. Primary Antibody: Anti-CD68 at 1:1000 overnight at 2-8°C. Secondary Antibody: Goat Anti-Rabbit IgG HRP (p/n 611-103-122) at 1:70,000 for 60 mins at RT. Block: BlockOut Buffer (p/n MB-073). Expected MW: ~60-70kDa recombinant CD68. Observed MW: ~75kDa.



Anti-CD68 (RABBIT) Antibody - Background

CD68, cluster of differentiation, is a 110-kD transmembrane glycoprotein that is highly expressed by 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. 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 leukemia (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. Anti-Cd68 antibody is suitable for researchers interested in cancer research and the immune system.