

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CD68 in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2449D
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Chinese Hamster Ovary cell line, CHO-derived mouse CD68 Asp21-Pro282 Accession # P31996
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

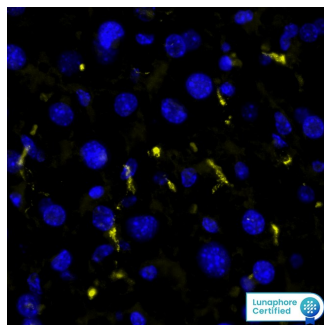
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Multiplex Immunofluorescence	5 µg/mL	Immersion fixed paraffin-embedded sections of mouse liver
Immunohistochemistry	3-25 µg/mL	See Below
Intracellular Staining by Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

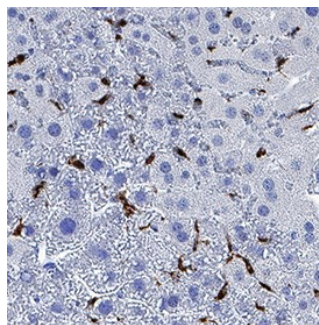
DATA

Multiplex Immunofluorescence



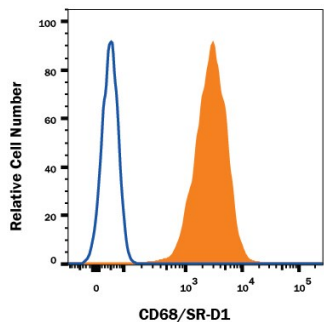
Detection of CD68 in Mouse Liver via seqIF™ staining on COMET™ CD68 Antibody was detected in immersion fixed paraffin-embedded sections of mouse Liver using Rabbit Anti-Mouse CD68, Monoclonal Antibody (Catalog #MAB101141) at 5µg/mL at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; Eprelia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ Plus 555 Goat anti-Rabbit IgG Secondary Antibody at 1:100 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # [DR555RB](#)) and counterstained with DAPI (blue; Lunaphore Catalog # [DR100](#)). Specific staining was localized to the cytoplasm of Kupffer cells. Protocol available in [COMET™ Panel Builder](#).

Immunohistochemistry



CD68/SR-D1 in Mouse Liver. CD68/SR-D1 was detected in immersion fixed paraffin-embedded sections of mouse liver using Rabbit Anti-Mouse CD68/SR-D1 Monoclonal Antibody (Catalog # MAB101141) at 3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # [VC003](#)). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # [CTS013](#)). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to Kupffer cells. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

Intracellular Staining by Flow Cytometry



Detection of CD68 in Raw264.7 Mouse Cell line by Flow Cytometry. Raw264.7 mouse cell line was stained with Rabbit Anti-Mouse CD68 Monoclonal Antibody (Catalog # MAB101141, filled histogram) or Normal Rabbit IgG Control (Catalog # [MAB1050](#), open histogram) followed by Phycoerythrin-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # [F0110](#)). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (1x) (Catalog # [FC004](#)) and permeabilized with ice-cold methanol.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Macrosialin (CD68) is a macrophage-restricted glycosylated transmembrane protein. It belongs to the lamp family and carries out specialized functions in dedicated phagocytic cells. Macrosialin binds to tissue- and organ-specific lectins to allow homing of macrophages to specific targets. Its presence in macrophages is useful in diagnosing conditions related to proliferation or abnormality of these cells.