

Mouse CD68 Monoclonal Antibody | anti-CD68 antibody

CD68

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA13569	Mouse	Human, Hamster, Mouse, Non-Human Primate, Porcine, Rabbit, Rat (Reactivity: Paraffin, Frozen)	Immunohistochemistry

PRODUCT SYNONYMS

CD68; Monoclonal Antibody; anti-CD68 antibody

PRODUCT SPECIFICATIONS

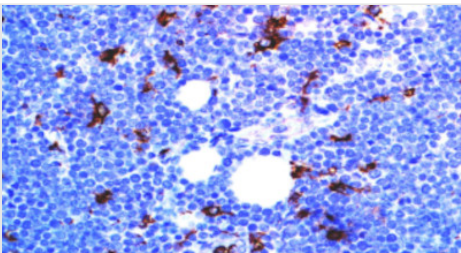
Host	Mouse
Reactivity	Human, Hamster, Mouse, Non-Human Primate, Porcine, Rabbit, Rat (Reactivity: Paraffin, Frozen)
Clonality	Monoclonal
Isotype	IgG1/?
Clone Number	KP-1
Form/Format	Anti-CD68 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.
Applicable Applications for anti-CD68 antibody	IHC (Immunohistochemistry)

Application Notes	This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Specimen Preparation: Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using ImmunoDNA Retriever with Citrate , ImmunoDNA Retriever with EDTA or ImmunoDNA Digestor. See reverse side for complete protocol. Tissue should remain hydrated via use of Immuno/DNA Washer solutions. Frozen sections and cell preparations: The antibody can be used for labeling acetone-fixed frozen sections and acetone-fixed cell preparations.!!Staining Procedure: 1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Hydrophilic Plus Slides. 2. Air dry for 2 hours at 58°C. 3. Deparaffinize, dehydrate and rehydrate tissues. 4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate or EDTA. 5. Any of three heating methods may be used: a. TintoRetriever Pressure Cooker or Equivalent Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA, and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature. b. TintoRetriever PT Module or Water Bath Method Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99°C. Incubate for 30-60 minutes. c. Conventional Steamer Method Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes. 6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes. 7. For manual staining, perform antibody incubation at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions. 8. Wash slides with ImmunoDNA washer or DI water. 9. Continue IHC staining protocol. Wash slides between each step with ImmunoDNA washer solution.
Immunogen	Subcellular fraction of human alveolar macrophages.
Localization	Cytoplasmic, Membranous
Control	Tonsil, Lymph Node
Intended Use	This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations.
Precautions	1. This product contains <0.1% sodium azide (NaN₃) as a preservative. Ensure proper handling procedures are used with this reagent. 2. Always wear personal protective equipment such as laboratory coat, goggles and gloves when handling reagents. 3. Dispose of unused solution with copious amount of water. 4. Do not ingest reagent. If reagent is ingested, seek medical advice immediately. 5. Avoid contact with eyes. If contact occurs, flush with large quantities of water. 6. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar). 7. For additional safety information refer to Safety Data Sheet for this product. 8. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Laboratories" (see References in this document).
Product Limitations	Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized and incubation time), optimal performance should be established through the use of positive and negative controls.
Mounting Protocols	For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMunter or organic solvent based resin such as PermaMunter please contact Technical Support.
Stability	This product is stable up to the expiration date on the product label. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use, and avoid prolonged exposure to room temperature conditions.

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Preparation and Storage	Store at 2-8°C.

IMAGES

Recommended IHC Protocol			
Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate-Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain	Varies	Varies	Varies



IHC (Immunohistochemistry)
Recommended IHC Protocol

IHC (Immunohistochemistry)
IHC of CD68 on an FFPE Tonsil Tissue

Antibody Type	Dilution	Volume/Qty
Tinto Prediluted	Ready-to-Use	3.0 mL
Tinto Prediluted	Ready-to-Use	7.0 mL
Tinto Prediluted	Ready-to-Use	15.0 mL
Concentrated	1:250 - 1:1000	0.1 mL
Concentrated	1:250 - 1:1000	0.5 mL
Concentrated	1:250 - 1:1000	1.0 mL
Control Slides	Not Applicable	5 slides

Dilution Information

ADDITIONAL INFORMATION

Related Product Information for anti-CD68 antibody	This antibody is intended for use in immunohistochemical applications on formalin fixed paraffin- embedded tissues (FFPE), frozen tissue sections and cell preparations. The CD68 antigen is a heavily glycosylated trans-membrane protein of 87-115 kDa which is specifically expressed by tissue macrophages, Langerhans cells and, at low levels, by dendritic cells. CD68 could play a role in phagocytic activities of tissue macrophages, both in intracellular lysosomal metabolism and extracellular cell-cell and cell-pathogen interactions. CD68 marks cells of monocyte/macrophage lineage. This antibody is capable of staining monocytes, Kupffer cells, osteoclasts, granulocytes and their precursors; Lymphomas are negative or show a few granules. This antibody may be useful for the identification of Myelomonocytic and Histiocytic Tumors. CD68 may help to distinguish Malignant Fibrous Histiocytoma from other Pleomorphic Sarcomas. However, since CD68 detects a formalin-resistant epitope that may be associated with lysosomal granules, other lysosome-rich cells may also produce positive results.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	298665
NCBI GeneID	968
NCBI Official Full Name	CD68
NCBI Official Synonym Full Names	CD68 molecule
NCBI Official Symbol	CD68
NCBI Official Synonym Symbols	GP110; LAMP4; SCARD1
NCBI Protein Information	macrosialin

UniProt Protein Name	Macrosialin
UniProt Gene Name	CD68
UniProt Entry Name	CD68_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/cd68-antibody-clone-kp-1-immunohistochemistry-elisa/13569>