

Mouse anti-Human CD163 Monoclonal Antibody | anti-CD163 antibody

CD163

CATALOG # AAA59254	HOST Mouse	REACTIVITY Human
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PRODUCT SYNONYMS

CD163; Monoclonal Antibody; anti-CD163 antibody

PRODUCT SPECIFICATIONS

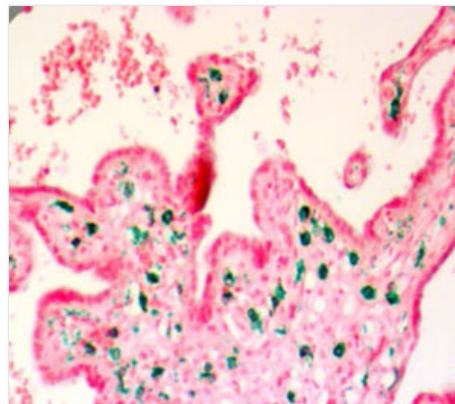
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Clone Number	10D6
Form/Format	CD163 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.
Control	Placenta, Tonsil, Lymph Node, Inflamed Tissue, H. Pylori
Localization	Cytoplasmic, Membranous
Immunogen	Recombinant protein encoding of domains 1-4 of the N-terminal region of human CD163.
Reactivity Note	Paraffin, Frozen
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 AMDL".
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.
Mounting Protocols	For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMunter or organic solvent based resin such as PermaMunter.
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. Results should be interpreted by a qualified medical professional.
Preparation and Storage	Store at 2 to 8 degree C in the dark. (Control Slides: Store at 20-25 degree C.)

IMAGES

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 / Coverslip	Varies	Varies	Varies

IHC (Immunohistochemistry)
Abbreviated Immunohistochemical Protocol



IHC (Immunohiostchemistry)

Antibody Type	Dilution	Volume/QTY
Prediluted	Ready-To-Use	3.0 ml
Prediluted	Ready-To-Use	7.0 ml
Prediluted	Ready-To-Use	15.0 ml
Concentrated	1:25-1:100	0.1 ml
Concentrated	1:25-1:100	0.5 ml
Concentrated	1:25-1:100	1.0 ml
Control Slides		5

Dilution Info

ADDITIONAL INFORMATION

Related Product Information for anti-CD163 antibody	CD163 is a protein that in humans is encoded by the CD163 gene. CD163 is the high affinity scavenger receptor for the hemoglobin-haptoglobin complex and in the absence of haptoglobin - with lower affinity - for hemoglobin alone. CD163 is expressed exclusively on the cell surface of human monocytes and macrophages that evolve predominantly in the late phase of inflammation, and is, therefore, very useful for macrophage-phenotyping. A soluble form of the receptor exists in plasma, commonly named sCD163, which is upregulated in a large range of inflammatory diseases including liver cirrhosis, type 2 diabetes, atherosclerosis, macrophage activation syndrome, Gaucher's disease, sepsis, HIV infection, rheumatoid arthritis and Hodgkin Lymphoma. CD163 positivity by IHC can be seen in histiocytes, gut, Kupffer cells, a few alveolar macrophages, the main population of macrophages in the placenta, and in varying degrees in macrophages in inflamed tissue including tumor tissue, depending on the inflammatory stage. Red-pulp, not white-pulp, macrophages in the spleen and cortical macrophages of the thymus are also positive for this marker. CD163 has been found to be helpful in distinguishing synovial macrophages from synovial intimal fibroblasts in the setting of rheumatoid arthritis, with superior specificity for macrophages than CD68, which does not discriminate between these cell types. It also has been confirmed in previous reports of having a prognostic role of tumor-infiltrating macrophages in classical Hodgkin's Lymphoma. Increased levels of CD163 have been detected in patients with microbial infections and myelomonocytic leukemias and studies have confirmed the fact that CD163 expression is limited to leukemias with monocytic differentiation. Another recent study showed that all 5 cases of synovial-type giant cell tumors of the spinal column were positive for CD163.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	5107945
UniProt Accession #	Q86VB7; Q07898; Q07899; Q07900; Q07901; Q2VLH7; C9JIG2
NCBI Official Full Name	CD163
UniProt Protein Name	Scavenger receptor cysteine-rich type 1 protein M130
UniProt Gene Name	CD163
UniProt Synonym Gene Names	M130
UniProt Entry Name	C163A_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.