

# Product Datasheet

## CD163 Antibody (EDHu-1) - BSA Free NB110-40686

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NB110-40686**

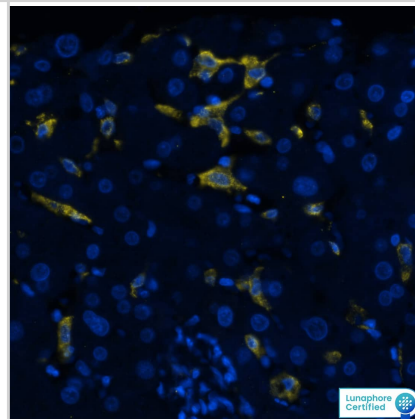
CD163 Antibody (EDHu-1) - BSA Free

<b>Product Information</b>	
<b>Unit Size</b>	0.1 mg
<b>Concentration</b>	1.0 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	EDHu-1
<b>Preservative</b>	0.09% Sodium Azide
<b>Isotype</b>	IgG1
<b>Purity</b>	Protein A purified
<b>Buffer</b>	PBS
<b>Target Molecular Weight</b>	125.5 kDa
<b>Product Description</b>	
<b>Host</b>	Mouse
<b>Gene ID</b>	9332
<b>Gene Symbol</b>	CD163
<b>Species</b>	Human
<b>Reactivity Notes</b>	Predicted cross-reactivities: Sheep, Rhesus Monkey, Guinea Pig, Bovine, Cynomolgus monkey, Porcine
<b>Marker</b>	Histiocytic Marker
<b>Specificity/Sensitivity</b>	NB110-40686 recognizes the human CD163 cell surface antigen, a 130-140 kDa glycoprotein expressed by tissue macrophages. CD163 is not expressed by resting peripheral blood leucocytes, but expression may be induced on monocytes by culture in dexamethasone.
<b>Immunogen</b>	Leucocytes harvested from the pleural cavity of patients with idiopathic spontaneous pneumothorax
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, ELISA, Flow Cytometry, Flow (Cell Surface), Immunoassay, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Multiplex Immunofluorescence
<b>Recommended Dilutions</b>	Western Blot 1:100 - 1:2000, Flow Cytometry 1:10 - 1:1000, ELISA 1:100 - 1:2000, Immunohistochemistry 1:10 - 1:500, Immunocytochemistry/ Immunofluorescence 1:10 - 1:500, Immunohistochemistry-Paraffin 1:10 - 1:500, Immunohistochemistry-Frozen 1:10 - 1:500, Immunoassay, Flow (Cell Surface) 1:10 - 1:1000, Multiplex Immunofluorescence
<b>Application Notes</b>	Clone EDHu-1 is reported to inhibit the binding of haptoglobin:haemoglobin complexes to CD163, see Madsen, M. et al. for details. Removal of sodium azide is recommended prior to use in functional studies.

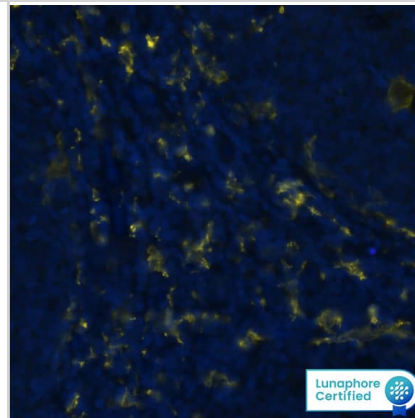


## Images

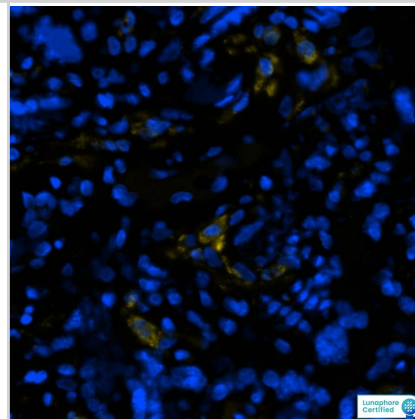
CD163 was detected in immersion fixed paraffin-embedded sections of human liver using Mouse Anti-Human CD163 Monoclonal Antibody (Novus Catalog # NB110-40686) at 1:50 at 37 °Celsius for 8 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; EpreDia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Mouse IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # [DR647MS](#)) and counterstained with DAPI (blue; Lunaphore Catalog # [DR100](#)). Specific staining was localized to the membrane and cytoplasm. Protocol available in [COMET™ Panel Builder](#).



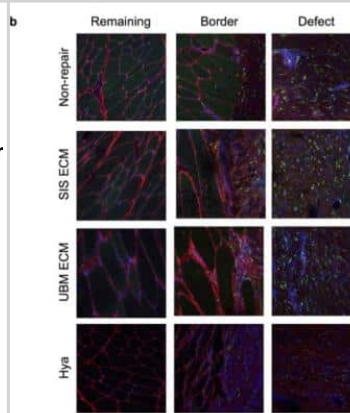
CD163 was detected in immersion fixed paraffin-embedded sections of human tonsil using Mouse Anti-Human CD163 Monoclonal Antibody (Novus Catalog # NB110-40686) at 20 µg/mL at 37 ° Celsius for 8 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9). Tissue was stained using the Alexa Fluor™ Plus 647 Goat anti-Mouse IgG Secondary Antibody at 1:200 at 37 ° Celsius for 8 minutes. (Yellow; Lunaphore Catalog # [DR647MS](#)) and counterstained with DAPI (blue; Lunaphore Catalog # [DR100](#)). Specific staining was localized to the membrane and cytoplasm. Protocol available in [COMET™ Panel Builder](#).



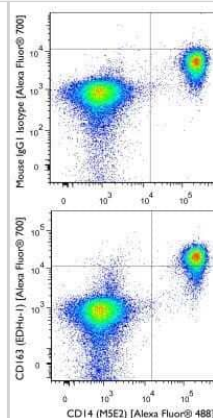
CD163 was detected in immersion fixed paraffin-embedded sections of human placenta using Mouse Anti-Human CD163 Monoclonal Antibody (Novus Catalog # NB110-40686) at 1:50 at 37 °Celsius for 8 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; EpreDia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Mouse IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # [DR647MS](#)) and counterstained with DAPI (blue; Lunaphore Catalog # [DR100](#)). Specific staining was localized to the membrane and cytoplasm. Protocol available in [COMET™ Panel Builder](#).



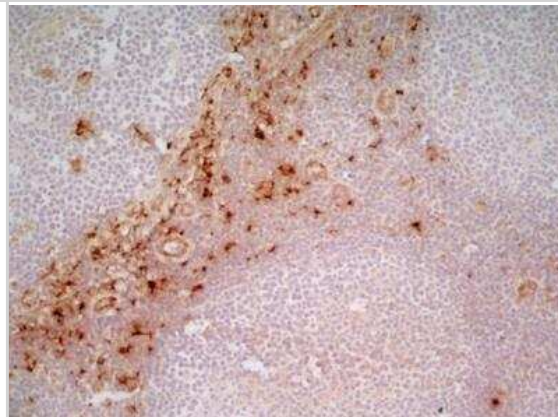
Non-repaired and repaired VML injured muscles present sustained putative macrophage infiltration. Representative histologic images labeled with CD163 (pan macrophage marker, green) and wheat germ agglutinin (WGA, red) and DAPI (nuclei, blue). Examples for each group, specifically the non-, SIS-, UMB-, and Hya-repaired are shown. Scale bar is 150 µm. Image collected and cropped by CiteAb from the following publication (<https://www.nature.com/articles/s41598-017-13306-2>), licensed under a CC-BY license.



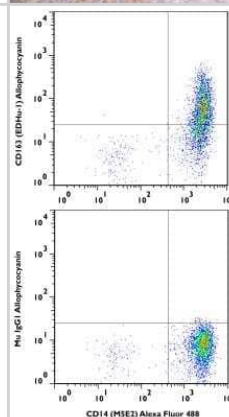
A surface stain was performed on hPBMCs with CD163 (EDHu-1) antibody NB110-40686AF700 and a matched isotype control NBP2-27287AF700. Cells were incubated in an antibody dilution of 5 ug/mL for 20 minutes at room temperature. A co-stain was performed with NB100-77758AF488. Image using the Alexa Fluor 700 form of this antibody.



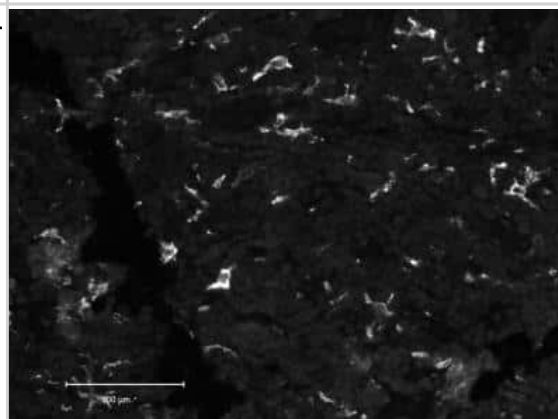
Staining of a human tonsil cryosection with Mouse anti Human CD163 antibody, clone EDHu-1.



A surface stain was performed on human peripheral blood monocytes with CD163 (EDHu-1) antibody NB110-40686APC and a matched isotype control NBP2-27287APC. Cells were incubated in an antibody dilution of 1 ug/mL for 20 minutes at room temperature. A co-stain was performed with NB100-77758AF488.

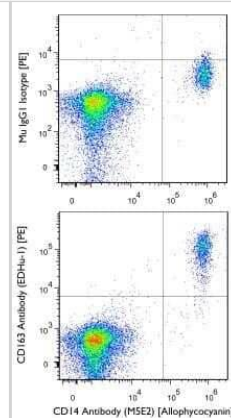


FFPE human tonsil, stained with anti-CD163, pH 9 antigen retrieval. IHC-P Image submitted by a verified customer review.

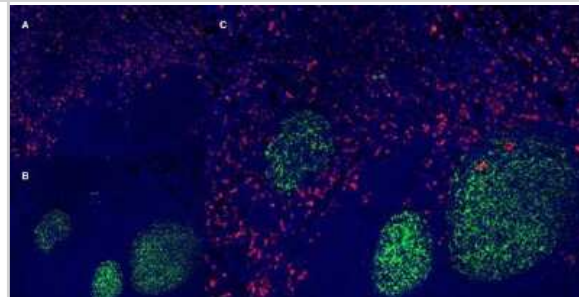




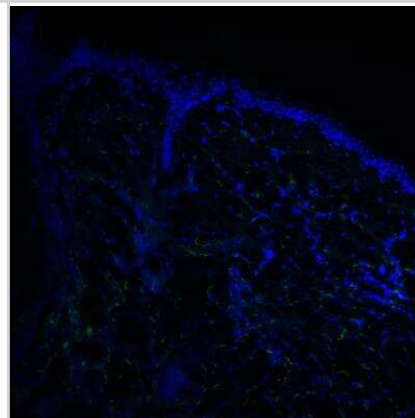
A surface stain was performed on hPBMCs with CD163 (EDHu-1) antibody NB110-40686PE and a matched isotype control NBP2-27287PE. Cells were incubated in an antibody dilution of 2.5 ug/mL for 20 minutes at room temperature. A co-stain was performed with NB100-77758APC. Image using the PE form of this antibody.



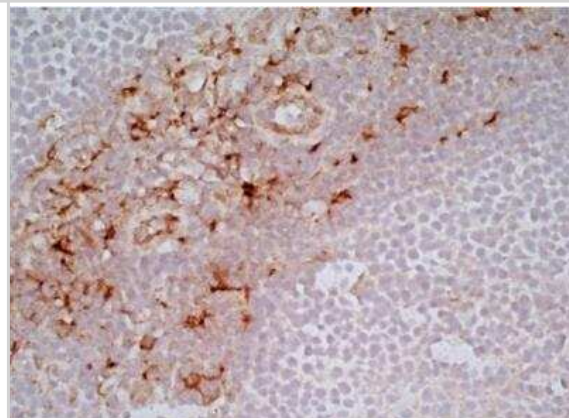
Human tonsil cryosection with Mouse anti Human CD163 antibody, clone, red in A and Mouse anti Human CD21 antibody, green in B. C is the merged image with nuclei counterstained blue using DAPI.



Frozen human skin sections. CD163 (green) in control human skin. Sections were fixed with 4% PFA PBS, permeabilized with 0.5% Triton TBS Ca/Azide, and blocked with a 5% BSA 0.05% T20 TBS Ca/Azide solution. Antibody was diluted 1:100 and applied for 1 hr at 37C. Detection was performed with anti-host conjugated antibody, and sections were counterstained with DAPI. IHC-Fr image submitted by a verified customer review.



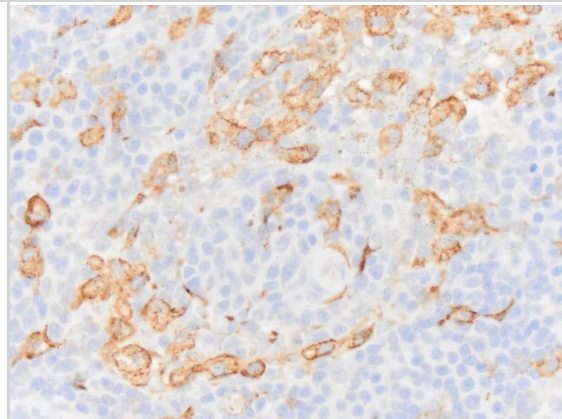
Staining of a human tonsil cryosection with Mouse anti Human CD163 antibody, clone EDHu-1.



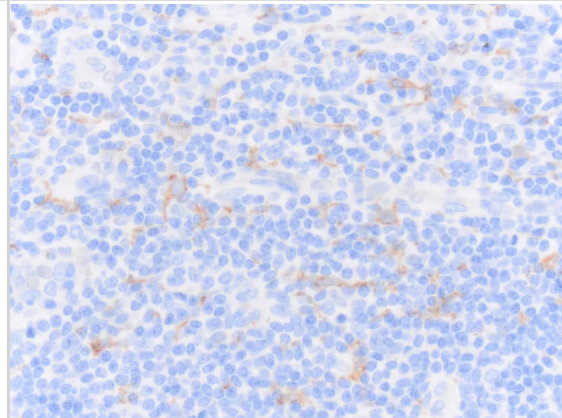
Immunohistochemistry-Frozen: CD163 Antibody (EDHu-1) [NB110-40686] - Staining of a human tonsil cryosection with Mouse anti Human CD163 antibody, clone EDHu-1.



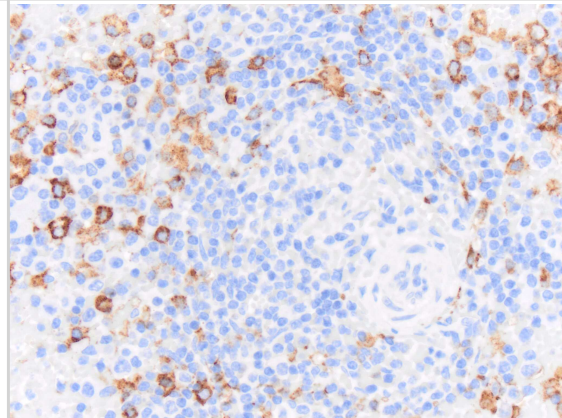
Immunohistochemistry-Paraffin: Mouse Monoclonal CD163 Antibody (EDHu-1) [NB110-40686] - CD163 immunoreactivity in a formalin fixed paraffin embedded section of canine lymph node. NB110-40686 was diluted to 0.25ug per mL and was left on the tissue section for 30m at room temperature. Section underwent 20m of heat induced epitope retrieval in a vegetable steamer using a citrate buffer. No signal was detected in sections that did not undergo HIER. Image from a verified customer review.



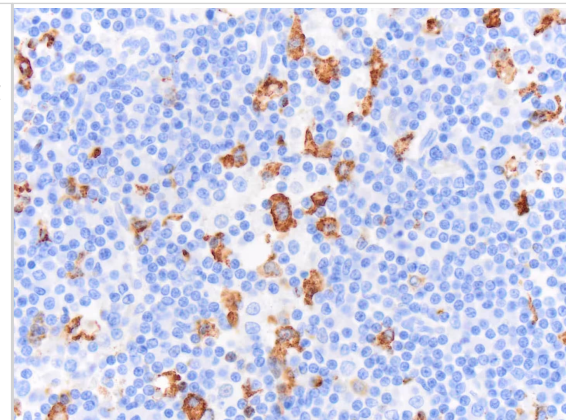
Immunohistochemistry-Paraffin: Mouse Monoclonal CD163 Antibody (EDHu-1) [NB110-40686] - CD163 immunoreactivity in an FFPE section of human tonsil. NB110-40686 was diluted to 250 ng/mL and left on tissue sections for 30min at room temperature. Secondary was horse anti mouse HRP polymer. Image from a verified customer review.



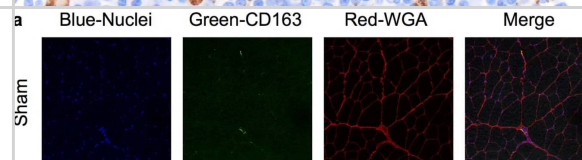
Immunohistochemistry-Paraffin: Mouse Monoclonal CD163 Antibody (EDHu-1) [NB110-40686] - CD163 immunoreactivity in an FFPE section of equine spleen. NB110-40686 was diluted to 250ng per mL and left on tissue sections for 30min at room temperature. Secondary was horse anti mouse HRP polymer. Image from a verified customer review.



Immunohistochemistry-Paraffin: Mouse Monoclonal CD163 Antibody (EDHu-1) [NB110-40686] - CD163 immunoreactivity in an FFPE section of feline lymph node. NB110-40686 was diluted to 250ng per mL and left on tissue sections for 30min at room temperature. Secondary was horse anti mouse HRP polymer. Image from a verified customer review.



Immunocytochemistry/ Immunofluorescence: CD163 Antibody (EDHu-1) [NB110-40686] - Non-repaired & repaired VML injured muscles present sustained putative macrophage infiltration. Representative histologic images labeled with CD163 (pan macrophage marker) & wheat germ agglutinin (WGA) & DAPI (nuclei). (a) For each of the sham muscle sections individual & merged images are presented. (b) Examples for each group, specifically the non-, SIS-, UMB-, & Hya-repaired are shown. Scale bar is 150  $\mu$ m; all images are at the same magnification & follow the same location pattern displayed specifically in Fig. 4e. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/29030619>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.





## Publications

Gupta T, Antanaviciute A, Hyun-Jung Lee C, Ottakandathil Babu R et Al. Tracking in situ checkpoint inhibitor-bound target T cells in patients with checkpoint-induced colitis *Cancer Cell* 2024-05-14 [PMID: 38744246]

Moysi E, Del Rio Estrada PM, Torres-Ruiz F et al. In Situ Characterization of Human Lymphoid Tissue Immune Cells by Multispectral Confocal Imaging and Quantitative Image Analysis; Implications for HIV Reservoir Characterization *Frontiers in Immunology* 2021-06-09 [PMID: 34177929]

D Phillips, M Matusiak, BR Gutierrez, SS Bhate, GL Barlow, S Jiang, J Demeter, KS Smythe, RH Pierce, SP Fling, N Ramchurren, MA Cheever, Y Goltsev, RB West, MS Khodadoust, YH Kim, CM Schürch, GP Nolan Immune cell topography predicts response to PD-1 blockade in cutaneous T cell lymphoma *Nature Communications*, 2021-11-18;12(1):6726. 2021-11-18 [PMID: 34795254]

Koenig MR, Mitzey AM, Morgan TK et al. Infection of the maternal-fetal interface and vertical transmission following low-dose inoculation of pregnant rhesus macaques (*Macaca mulatta*) with an African-lineage Zika virus *PloS one* 2023-05-04 [PMID: 37141276] (IHC, Macaque)

### Details:

Macaca mulatta, Rhesus Macaques

Scheepstra KWF, Mizze MR, van Scheppingen J et al. Microglia transcriptional profiling in major depressive disorder shows inhibition of cortical grey matter microglia *Biological psychiatry* 2023-04-28 [PMID: 37121366] (IHC-P)

Maldonado LAG, Nascimento CR, Rodrigues Fernandes NA et al. Influence of tumor cell-derived TGF- $\beta$  on macrophage phenotype and macrophage-mediated tumor cell invasion *The international journal of biochemistry & cell biology* 2022-12-01 [PMID: 36343916] (IHC-P, Human)

Badr Y, Noreldin AE, Elewa YHA et al. Cellular infiltration, cytokines, and histopathology of skin lesions associated with different clinical forms and stages of naturally occurring lumpy skin disease in cattle *Comparative immunology, microbiology and infectious diseases* 2022-10-07 [PMID: 36270050] (IHC-P, Bovine)

Monguio-Tortajada M, Prat-Vidal C, Martinez-Falguera D et al. Acellular cardiac scaffolds enriched with MSC-derived extracellular vesicles limit ventricular remodelling and exert local and systemic immunomodulation in a myocardial infarction porcine model *Theranostics* 2022-06-06 [PMID: 35832072] (FLOW, IHC-Fr, Porcine)

Ding M, Dang W, Liu H et al. Combinational Deletions of MGF360-9L and MGF505-7R Attenuated Highly Virulent African Swine Fever Virus and Conferred Protection against Homologous Challenge *Journal of virology* 2022-07-27 [PMID: 35867564] (ICC/IF, Bovine)

Fujita M, Matsumoto T, Hayashi S et al. Paracrine effect of the stromal vascular fraction containing M2 macrophages on human chondrocytes through the Smad2/3 signaling pathway *Journal of cellular physiology* 2022-06-29 [PMID: 35766589]

Jiang S, Chan CN, Rovira-ClavE X et al. Combined protein and nucleic acid imaging reveals virus-dependent B cell and macrophage immunosuppression of tissue microenvironments *Immunity* 2022-04-12 [PMID: 35447093]

Olwenyi O, Johnson S, Bidokhti M et al. Chronic Morphine Exposure distorts Gut-Brain Interrelationships in SHIV Infected Rhesus Macaques *Research Square* 2022-03-02 (ICC/IF, Rhesus Macaque)

More publications at <http://www.novusbio.com/NB110-40686>







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### **Products Related to NB110-40686**

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NBL1-08909	CD163 Overexpression Lysate
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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