

# CD163 Monoclonal Antibody (eBioGHI/61 (GHI/61)), Super Bright™ 645, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioGHI/61 (GHI/61)
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2762566

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	5 µL (1.0 µg)/Test	12 Publications

## Product Specific Information

**Description:** The eBioGHI/61 monoclonal antibody reacts with human CD163 (Haemoglobin Scavenger Receptor, M130), a member of the macrophage scavenger receptor family. CD163 is expressed by tissue macrophages, circulating blood monocytes, and some reports suggest that it may also be expressed by haematopoietic progenitor cells. CD163 functions as a high affinity scavenger receptor for the complex of haemoglobin and haptoglobin which forms to clear haemoglobin from the blood. The high affinity for CD163 is specific for the haemoglobin-haptoglobin complex, whereas haemoglobin or haptoglobin display no to low affinity toward CD163. Upon ligand binding, CD163 initiates signal transduction which leads to the production of IL-6 and IL-10. Furthermore, it has been demonstrated that cytokines such as IL-6 and IL-10 can induce expression of CD163, whereas proinflammatory stimuli, such as LPS or TNF alpha, can cause shedding of a soluble form of CD163, whose function is unclear.

**Applications Reported:** This eBioGHI/61 (GHI/61) antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This eBioGHI/61 (GHI/61) antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (1.0 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

Super Bright 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

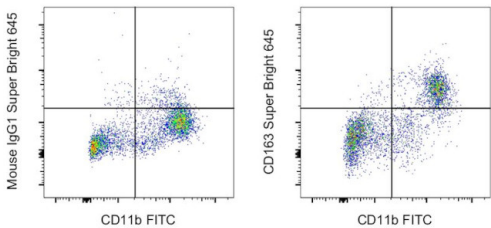
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 645 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

**Product Images For CD163 Monoclonal Antibody (eBioGHI/61 (GHI/61)), Super Bright™ 645, eBioscience™**



**CD163 Antibody (64-1639-42) in Flow**  
Normal human peripheral blood cells were stained with CD11b Monoclonal Antibody, FITC (Product # 11-0118-42) and Mouse IgG1 kappa Isotype Control, Super Bright 645 (Product # 64-4714-82) (left) or CD163 Monoclonal Antibody, Super Bright 645 (right). Cells in the monocyte gate were used for analysis.

[View more figures on thermofisher.com](https://thermofisher.com)

## Immunohistochemistry (1)

Cell death & disease

### CCL5 derived from tumor-associated macrophages promotes prostate cancer stem cells and metastasis via activating -catenin/STAT3 signaling.

"Published figure using CD163 monoclonal antibody (Product # 64-1639-42) in Immunohistochemistry"

Authors: Huang R,Wang S,Wang N,Zheng Y,Zhou J,Yang B,Wang X,Zhang J,Guo L,Wang S,Chen Z,Wang Z,Xiang S

Year  
2020

## Flow Cytometry (12)

PeerJ

### SARS-CoV-2 Delta (B.1.617.2) variant replicates and induces syncytia formation in human induced pluripotent stem cell-derived macrophages.

"Published figure using CD163 monoclonal antibody (Product # 64-1639-42) in Flow Cytometry"

Authors: Thaweerattanasin T,Wanitchang A,Saenboonrueng J,Srisutthisamphan K,Wanasen N,Sungsuwan S, Jongkaewwattana A,Chailangkarn T

Year  
2023

CNS neuroscience & therapeutics

### PTX3 mediates the infiltration, migration, and inflammation-resolving-polarization of macrophages in glioblastoma.

"Published figure using CD163 monoclonal antibody (Product # 64-1639-42) in Flow Cytometry"

Authors: Zhang H,Wang Y,Zhao Y,Liu T,Wang Z,Zhang N,Dai Z,Wu W,Cao H,Feng S,Zhang L,Cheng Q,Liu Z

Year  
2022

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## More applications with references on thermofisher.com

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