CD163 Monoclonal Antibody (TNKUPJ), Super Bright™ 436, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	TNKUPJ
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 nm
Form	Liquid
Concentration	0.2 mg/mL
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_2784824

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Flow Cytometry (Flow)	0.25 µg/test	9 Publications

Product Specific Information

Description: This TNKUPJ monoclonal antibody recognizes mouse CD163. CD163 is a 130kDa surface receptor expressed by certain subsets of tissue macrophages, including splenic red pulp macrophages, Kupffer cells, intestinal lamina propria macrophages and a small fraction of peritoneal macrophages. In contrast to human blood monocytes, mouse monocytes do not express CD163. Also, unlike human CD163, mouse CD163 is not as readily induced by M2 polarizing cytokines, and it is not a good marker of M2 macrophages. No common cell lines of monocytic or macrophage origin express mouse CD163. In humans, CD163 has been shown to be proteolytically cleaved and shed from the cell surface, and it acts as a soluble anti-inflammatory factor.

This TNKUPJ antibody will detect CD163 on fixed and permeabilized cells allowing for staining of the intracellular pool of this receptor. Although CD163 is relatively stable to collagenase digestion, aggressive tissue dissociation protocols might potentially decrease the amount of surface CD163. In these cases intracellular detection is recommended.

Applications Reported: This TNKUPJ antibody has been reported for use in flow cytometric analysis.

Applications Tested: This TNKUPJ antibody has been tested by flow cytometric analysis of mouse splenocytes. This may be used at less than or equal to 0.25 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

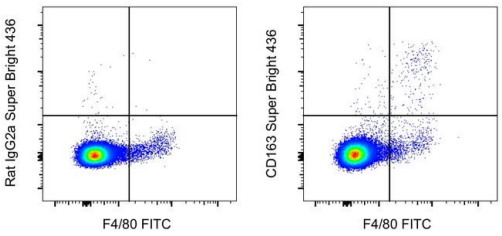
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

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.

Excitation: 405 nm; Emission: 436 nm; Laser: Violet Laser

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

Product Images For CD163 Monoclonal Antibody (TNKUPJ), Super Bright™ 436, eBioscience™



CD163 Antibody (62-1631-80) in Flow
BALB/c mouse splenocytes were stained with F4/80 Monoclonal Antibody, FITC (Product # 11-4321-82) and 0.125 µg of Rat IgG2a kappa Isotype Control, Super Bright 436 (Product # 62-4321-82) (left) or 0.125 µg of CD163 Monoclonal Antibody, Super Bright 436 (right). Total cells were used for analysis.

View more figures on thermofisher.com

11 References

Immunohistochemistry (2)

eLife

Year
2022

The regional distribution of resident immune cells shapes distinct immunological environments along the murine epididymis.

"Published figure using CD163 monoclonal antibody (Product # 62-1631-82) in Immunohistochemistry"

Authors: Pleuger C,Ai D,Hoppe ML,Winter LT,Bohnert D,Karl D,Guenther S,Epelman S,Kantores C,Fijak M,Ravens S, Middendorff R,Mayer JU,Loveland KL,Hedger M,Bhushan S,Meinhardt A

Nature materials

Year
2021

Tumour-associated macrophages drive stromal cell-dependent collagen crosslinking and stiffening to promote breast cancer aggression.

"Published figure using CD163 monoclonal antibody (Product # 62-1631-82) in Immunohistochemistry"

Authors: Maller O,Drain AP,Barrett AS,Borgquist S,Ruffell B,Zakharevich I,Pham TT,Gruosso T,Kuasne H,Lakins JN, Acerbi I,Barnes JM,Nemkov T,Chauhan A,Gruenberg J,Nasir A,Bjarnadottir O,Werb Z,Kabos P,Chen YY,Hwang ES, Park M,Coussens LM,Nelson AC,Hansen KC,Weaver VM

Flow Cytometry (9)

EMBO reports

Year
2023

Pericyte stem cells induce Ly6G^{+} cell accumulation and immunotherapy resistance in pancreatic cancer.

"Published figure using CD163 monoclonal antibody (Product # 62-1631-82) in Flow Cytometry"

Authors: Wu Z,Thierry K,Bachy S,Zhang X,Gamradt P,Hernandez-Vargas H,Mikaelian I,Tonon L,Pommier R,Zhao Y, Bertolino P,Hennino A

Cancer cell international

Year
2022

Tumor cell-derived asymmetric dimethylarginine regulates macrophage functions and polarization.

"Published figure using CD163 monoclonal antibody (Product # 62-1631-82) in Flow Cytometry"

Authors: Chen YL,Lowery AT,Lin S,Walker AM,Chen KE

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