

# Product Datasheet

## CD14 Antibody (M5E2) - BSA Free NB100-77758

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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Updated 10/23/2024 v.20.1

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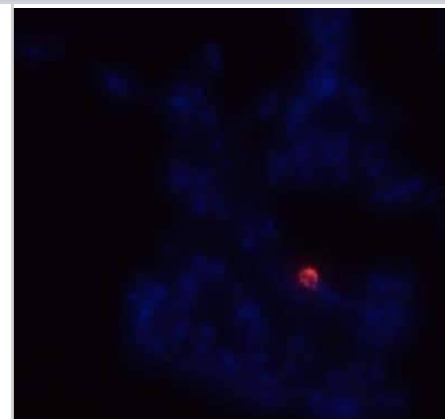
**NB100-77758**

CD14 Antibody (M5E2) - BSA Free

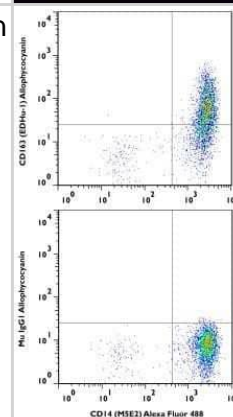
<b>Product Information</b>	
<b>Unit Size</b>	0.1 mg
<b>Concentration</b>	1.0 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	M5E2
<b>Preservative</b>	0.02% Sodium Azide
<b>Isotype</b>	IgG2a Kappa
<b>Purity</b>	Protein G purified
<b>Buffer</b>	PBS
<b>Product Description</b>	
<b>Host</b>	Mouse
<b>Gene ID</b>	929
<b>Gene Symbol</b>	CD14
<b>Species</b>	Human, Porcine, Bovine, Canine, Primate
<b>Reactivity Notes</b>	Expected to cross react with Chimpanzee, Cynomolgus, Rhesus, Pigtailed Macaque, Capuchin Monkey, Cotton-topped Tamarin, Common Marmoset, Squirrel Monkey.
<b>Immunogen</b>	Human peripheral blood cells.
<b>Product Application Details</b>	
<b>Applications</b>	Simple Western, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Block/Neutralize, CyTOF-ready, Dual RNAscope ISH-IHC
<b>Recommended Dilutions</b>	Simple Western 50 ug/ml, Flow Cytometry &lt; 2.0 ug/10 <sup>6</sup> cells in 100 ul, Immunohistochemistry 1:10 - 1:500, Immunocytochemistry/ Immunofluorescence 1:10 - 1:500, Immunohistochemistry-Frozen 1:10 - 1:500, CyTOF-ready, Block/Neutralize reported in scientific literature (PMID 27228163), Dual RNAscope ISH-IHC
<b>Application Notes</b>	The M5E2 antibody inhibits monocyte activation and cytokine production induced by LPS. Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections, blocking of LPS stimulation, and immunofluorescence microscopy. Clone M5E2 is not recommended for immunohistochemical staining of formalin-fixed paraffin-embedded sections. This antibody is CyTOF ready. See <a href="#">Simple Western Antibody Database</a> for Simple Western validation: tested in THP-1; antibody dilution of 50 ug/ml; separated by size; detects a band at 54 kDa

## Images

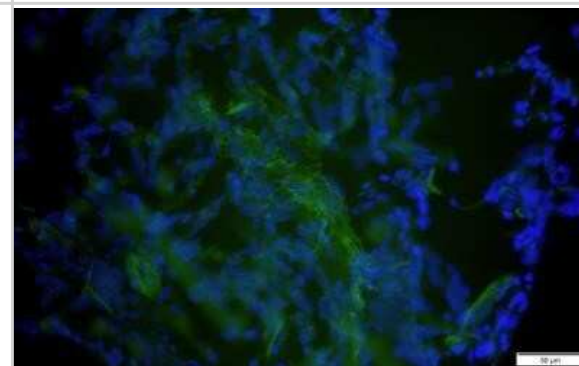
Immunocytochemistry/Immunofluorescence: CD14 Antibody (M5E2) [NB100-77758] - Representative immunostaining of CD14 (red) in adult human lung tissue sample with nuclei counterstained blue. This image was submitted by customer review. Image from the Alexa Fluor 647 version of this antibody.



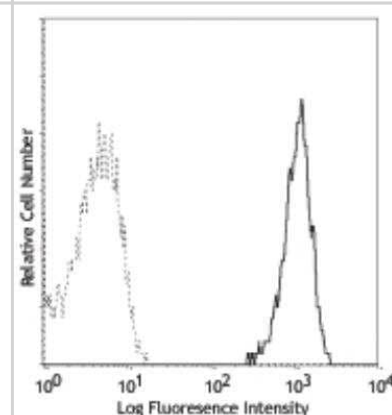
Flow Cytometry: CD14 Antibody (M5E2) [NB100-77758] - A surface stain was performed on human peripheral blood monocytes with CD163 (EDHu-1) antibody NB110-40686APC and a matched isotype control NBP2-27287APC. Cells were incubated in an antibody dilution of 1 ug/mL for 20 minutes at room temperature. A co-stain was performed with NB100-77758AF488.



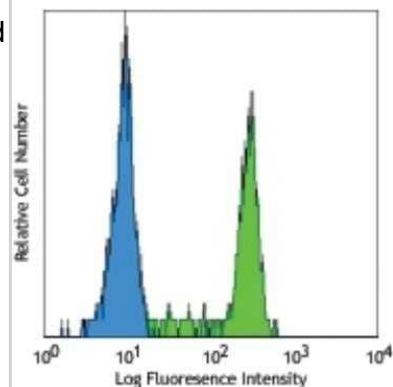
Immunocytochemistry/Immunofluorescence: CD14 Antibody (M5E2) [NB100-77758] - Human lung tissue was stained with FITC-conjugated CD14 (Green) for overnight. Image from the Alexa Fluor 488 version of this antibody.



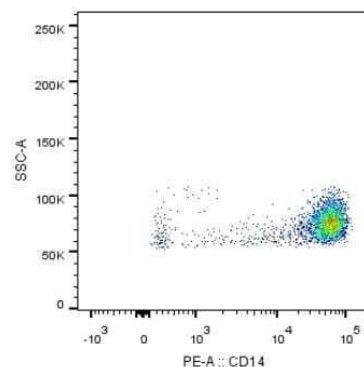
Flow Cytometry: CD14 Antibody (M5E2) [NB100-77758] - Human peripheral blood monocytes stained with M5E2 APC



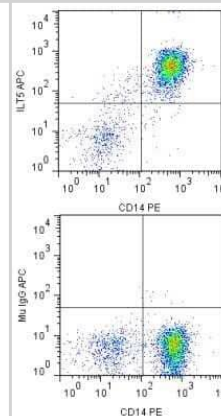
Flow Cytometry: CD14 Antibody (M5E2) [NB100-77758] - Analysis using the FITC conjugate of NB100-77758. Staining of Human peripheral blood monocytes with M5E2 FITC.



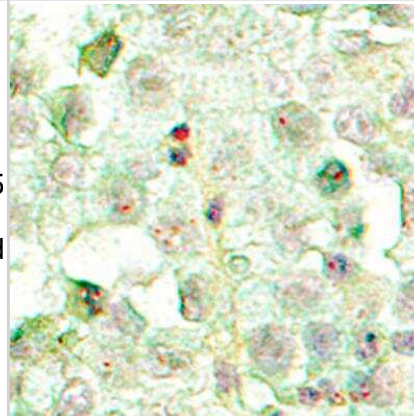
Flow Cytometry: CD14 Antibody (M5E2) [NB100-77758] - Analysis using the PE conjugate of NB100-77758. Staining of CD14 in human PBMC using anti-CD14 antibody conjugated with PE. Image from verified customer review.



Flow Cytometry: CD14 Antibody (M5E2) [NB100-77758] - Analysis using PE conjugate of NB100-77758. A cell surface stain was performed on hPBMCs with ILT5 antibody (MM0413-9S32) NBP2-11729 (top image) and a matched isotype control NBP2-27287 (bottom image). Cells were incubated in an antibody dilution of 1:200 for 20 minutes at room temperature. Both antibodies were conjugated to APC. A co-stain was performed using CD14 antibody (M5E2) NB100-77758PE.



Dual RNAscope ISH-IHC: CD14 Antibody (M5E2) [NB100-77758] - TNFA mRNA (red) and CD14 protein (green) were detected in formalin-fixed paraffin-embedded tissue sections of human malignant lymph node. ACD's Integrated Co-Detection Workflow was performed using ACD RNAscope Probe Hs-TNFA and CD14 antibody (M5E2) at 1:200 dilution. Tissue was stained on Leica Bond RX using RNAscope (TM) 2.5 LS Reagent Kit-RED, BOND Polymer Refine Detection (DAB) and Hematoxylin, BOND Polymer Refine Red Detection and Hematoxylin and RNAscope (TM) 2.5 LS Green Accessory Pack. Tissue was counterstained with 50% hematoxylin (blue).



## Publications

Spindler LM, Feuerhake A, Ladel S et al. Nano-in-Micro-Particles Consisting of PLGA Nanoparticles Embedded in Chitosan Microparticles via Spray-Drying Enhances Their Uptake in the Olfactory Mucosa Frontiers in Pharmacology 2021-09-01 [PMID: 34539414] (Immunohistochemistry)

Kakiuchi-Kiyota, S, Obert, L A Et al. Expression of Hematopoietic Stem and Endothelial Cell Markers in Canine Hemangiosarcoma. Toxicol Pathol 2020-04-01 [PMID: 31918642] (IF/IHC, WB, Human)

Nitta S, Kusakari Y, Yamada Y et al. Conversion of mesenchymal stem cells into a canine hepatocyte-like cells by Foxa1 and Hnf4a Regenerative Therapy 2020-01-01 [PMID: 32123700] (FLOW, Canine)

Amin SB, Anderson KJ, Boudreau CE et al. Comparative Molecular Life History of Spontaneous Canine and Human Gliomas Cancer Cell 2020-02-10 [PMID: 32049048]

Bertolo A, Steffen F, Malonzo-Marty C et al Canine Mesenchymal Stem Cell Potential and the Importance of Dog Breed: Implication for Cell-Based Therapies. Cell Transplant. 2014-11-05 [PMID: 25375819] (FLOW, Canine)

### Details:

Citation using the FITC version of this antibody.

Bertolo A, Pavlicek D, Gemperli A et al. Increased motility of mesenchymal stem cells is correlated with inhibition of stimulated peripheral blood mononuclear cells in vitro. J Stem Cells Regen Med 2017-12-18 [PMID: 29391751]

### Details:

This citation used the FITC version of this antibody.

Walksman R, Lipinski MJ, Acampado E et al. Comparison of Acute Thrombogenicity for Metallic and Polymeric Bioabsorbable Scaffolds Magmaris Versus Absorb in a Porcine Arteriovenous Shunt Model. Circ Cardiovasc Interv. 2017-08-10 [PMID: 28801538] (Porcine)

Bertolo A, Capossela S, Frankl G et al. Oxidative status predicts quality in human mesenchymal stem cells Stem Cell Res Ther Jan 6 2017 12:00AM [PMID: 28061861] (FLOW, Human). Stem Cell Res Ther. 2017-01-06 [PMID: 28061861] (FLOW, Human)

### Details:

This citation used the FITC version of this antibody.

Xun C Brown SA Jennings CD et al. Acute graft-versus-host-like disease induced by transplantation of human activated natural killer cells into SCID mice. Transplantation. [PMID: 8356598]

Rhoades JL Cibull ML Thompson JS et al. Role of natural killer cells in the pathogenesis of human acute graft-versus-host disease. Transplantation. [PMID: 8333033]

Waid TH Lucas BA Thompson JS et al. Treatment of acute cellular rejection with T10B9.1A-31 or OKT3 in renal allograft recipients. Transplantation. [PMID: 1531095]

Bertolo A, Gemperli A, Gruber M et al. In vitro cell motility as a potential mesenchymal stem cell marker for multipotency Stem Cells Transl Med 2015-01-01 [PMID: 25473086]

### Details:

This citation used the FITC version of this antibody.

More publications at <http://www.novusbio.com/NB100-77758>





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### **Products Related to NB100-77758**

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NBL1-08905	CD14 Overexpression Lysate
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)

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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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