

# CD14 Monoclonal Antibody (61D3), Super Bright™ 780, 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™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	61D3
Conjugate	Super Bright™ 780
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_2734878

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	8 Publications
Neutralization (Neu)	-	1 Publication

## Product Specific Information

**Description:** The 61D3 monoclonal antibody reacts with human CD14, a 53-55 kDa GPI-linked glycoprotein. CD14 is expressed on monocytes, interfollicular macrophages and some dendritic cells. Complexes of LPS and LBP (LPS-Binding Protein) bind with high affinity to monocytes through the surface CD14.

**Applications Reported:** This 61D3 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This 61D3 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (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<sup>5</sup> to 10<sup>8</sup> cells/test.

Super Bright 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 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.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres (Product # 01-2222-42) as compared to single-color stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads (Product # A10497).

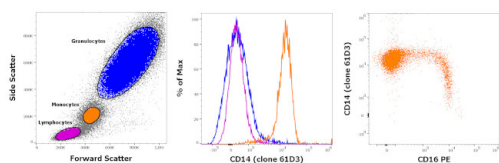
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) 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: 780 nm; Laser: Violet Laser

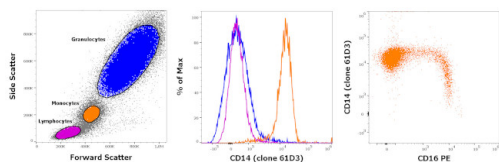
Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

## Product Images For CD14 Monoclonal Antibody (61D3), Super Bright™ 780, eBioscience™



### CD14 Antibody (78-0149-42)

Staining of human peripheral blood mononuclear cells with CD45 Pacific Blue, CD16 PE and CD14 Super Bright 780. As expected based on known relative expression patterns, CD14 clone 61D3 stains monocytes (orange) and granulocytes (blue), but not lymphocytes (pink). {RE}



### CD14 Antibody (78-0149-42) in Flow

Staining of human peripheral blood mononuclear cells with CD45 Pacific Blue, CD16 PE and CD14 Super Bright 780. As expected based on known relative expression patterns, CD14 clone 61D3 stains monocytes (orange) and granulocytes (blue), but not lymphocytes (pink).

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

## 11 References

### Immunohistochemistry (1)

<b>PloS one</b> <b>Biologically active polymers from spontaneous carotenoid oxidation: a new frontier in carotenoid activity.</b> "Published figure using CD14 monoclonal antibody (Product # 78-0149-42) in Immunohistochemistry" Authors: Johnston JB,Nickerson JG,Daroszewski J,Mogg TJ,Burton GW	<b>Year</b> 2015
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### Immunocytochemistry (1)

<b>Scientific reports</b> <b>Thrombomodulin regulates monocyte differentiation via PKC and ERK1/2 pathway in vitro and in atherosclerotic artery.</b> "Published figure using CD14 monoclonal antibody (Product # 78-0149-42) in Immunocytochemistry" Authors: Tsai CS,Lin YW,Huang CY,Shih CM,Tsai YT,Tsao NW,Lin CS,Shih CC,Jeng H,Lin FY	<b>Year</b> 2016
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### Flow Cytometry (8)

<b>International journal of biological sciences</b> <b>MiR-103 protects from recurrent spontaneous abortion via inhibiting STAT1 mediated M1 macrophage polarization.</b> "Published figure using CD14 monoclonal antibody (Product # 78-0149-42) in Flow Cytometry" Authors: Zhu X,Liu H,Zhang Z,Wei R,Zhou X,Wang Z,Zhao L,Guo Q,Zhang Y,Chu C,Wang L,Li X	<b>Year</b> 2021
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<b>Heliyon</b> <b>SARS-CoV-2 infection paralyzes cytotoxic and metabolic functions of the immune cells.</b> "Published figure using CD14 monoclonal antibody (Product # 78-0149-42) in Flow Cytometry" Authors: Singh Y,Trautwein C,Fendel R,Krickeberg N,Berezhnoy G,Bissinger R,Ossowski S,Salker MS,Casadei N,Riess O	<b>Year</b> 2021
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[View more Flow references on thermofisher.com](#)

### More applications with references on thermofisher.com

### Neu (1)

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