

# CD14 Monoclonal Antibody (61D3), 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	61D3
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_2662458

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	5µL (0.5 µg)/test	17 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-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.5 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.

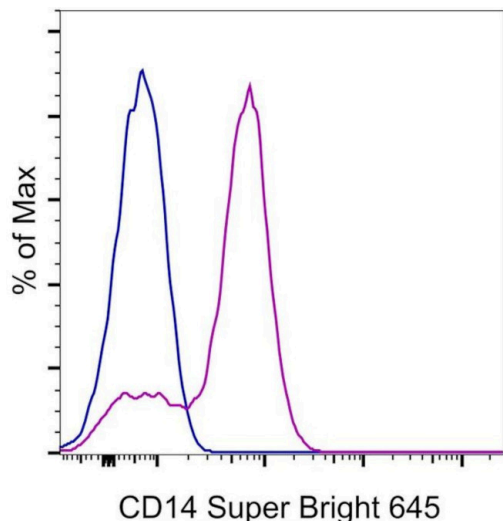
**Light sensitivity:** This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

**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:** 645 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™ 645, eBioscience™



### CD14 Antibody (64-0149-42) in Flow

Staining of normal human peripheral blood cells with Mouse IgG1 K Isotype Control Super Bright 645 (Product # 64-4714-82) (blue histogram) or Anti-Human CD14 Super Bright 645 (purple histogram). Cells in the monocyte gate were used for analysis.

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

## 21 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 # 64-0149-42) in Immunohistochemistry" Authors: Johnston JB,Nickerson JG,Daroszewski J,Mogg TJ,Burton GW	<b>Year</b> 2015
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### Immunocytochemistry (2)

<b>Nature communications</b> <b>Early macrophage response to obesity encompasses Interferon Regulatory Factor 5 regulated mitochondrial architecture remodelling.</b> "Published figure using CD14 monoclonal antibody (Product # 64-0149-42) in Immunocytochemistry" Authors: Orliaguet L,Ejlaalmanesh T,Humbert A,Ballaire R,Diedisheim M,Julla JB,Chokr D,Cuenco J,Michieletto J,Charbit J,Lindén D,Boucher J,Potier C,Hamimi A,Lemoine S,Blugeon C,Legoix P,Lameiras S,Baudrin LG,Baulande S,Soprani A,Castelli FA,Fenaille F,Riveline JP,Dalmas E,Rieusset J,Gautier JF,Venteclef N,Alzaid F	<b>Year</b> 2022
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<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 # 64-0149-42) 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 (17)

<b>Particle and fibre toxicology</b> <b>Saharan dust induces NLRP3-dependent inflammatory cytokines in an alveolar air-liquid interface co-culture model.</b> "Published figure using CD14 monoclonal antibody (Product # 64-0149-42) in Flow Cytometry" Authors: Bredeck G,Dobner J,Stahlmecke B,Fomba KW,Herrmann H,Rossi A,Schins RPF	<b>Year</b> 2023
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[View more Flow references on thermofisher.com](#)

### More applications with references on thermofisher.com

## Neu (1)

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