CD14 Monoclonal Antibody (TuK4), Qdot™ 800

Product Details	
Size	100 µL
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG2a
Class	Monoclonal
Type	Antibody
Clone	TuK4
Conjugate	Qdot™ 800
Excitation/Emission Max	300/792 nm
Immunogen	Tthe CD14 antigen
Form	Liquid
Purification	purified
Storage buffer	0.05M borate, pH 8.3, with 1M betaine
Contains	0.05% sodium azide
Storage conditions	4° C, store in dark
RRID	AB_2556449

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	Assay-dependent	6 Publications
Miscellaneous PubMed (Misc)	-	2 Publications

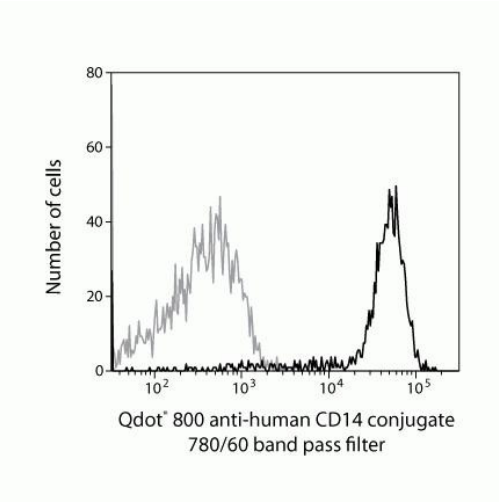
Product Specific Information

Qdot™ Antibody (Ab) conjugates possess a bright fluorescence emission that makes them well suited for the detection of low-abundance extracellular proteins. Approximately the same size as R-phycoerythrin (R-PE) and compatible with existing organic fluorophore conjugates, Qdot Ab conjugates can be excited with any wavelength below their emission maximum, but are best excited by UV or violet light. The narrow, symmetric emission profiles of Qdot Ab conjugates allow for minimal compensation when using a single excitation source, and the very long stoke shifts enable better, more efficient multicolor assays using the 405 nm violet laser. Available in multiple colors for use in flow cytometry, these advantages make Qdot Ab conjugates powerful tools for antibody labeling and staining. Staining: Stain cells in any standard staining buffer, such as phosphate buffered saline (PBS) with 1% bovine serum albumin (BSA). We recommend analysis of cells within 18 hours of staining. If dilute reagent is used, dilute only the quantity of reagent to be used within one day. Qdot Ab conjugates may be mixed with other antibodies, but use the diluted conjugates on the day of dilution. Qdot Ab conjugates can be used for surface staining applications with most conventional sample preparation reagents, such as Cal-Lyse™ Lysing Solution and FIX & PERM™ reagents, with minimal effect on fluorescence. We have observed some batches of BD FACS™ Lysing Solution to interfere with Qdot Ab conjugate fluorescence. Each lot has been tested by flow cytometry using human peripheral blood leukocytes.

Instrument setup: Qdot Ab conjugates are excited optimally with UV or 405 nm light, although excitation can be obtained with any wavelength below the emission maximum of a given Qdot™ nanocrystal, such as with a 488-nm laser. Qdot Ab conjugates can be used on cytometers that do not have UV or violet excitation sources as long as they have appropriate emission filters. Make sure the cytometer has an appropriate emission filter for the Qdot Ab conjugate being used; alternate filters can be used as long as they capture the emission maximum, but filter width impacts spectral overlap corrections. And be sure to check for Qdot Ab conjugate emission in any channel that can capture nanocrystal emission off of other lasers on the cytometer. For Cat. No. Q10064: peak excitation 405 (488) nm/peak emission 800 nm; recommended filter 780/60 nm.

Store reagents at 2-8°C in the dark. Do not freeze. Because Qdot nanocrystals are conjugated to biological materials, some loss of activity may be observed with prolonged storage. When stored as instructed, expires six months from date of receipt unless otherwise indicated on product label. Qdot Ab conjugates are photostable, and do not need to be protected from light. However, if using Qdot Ab conjugates in combination with conventional fluorochrome conjugated antibodies, minimize light exposure during handling, incubation with cells, and prior to analysis. The Qdot Ab conjugates contain cadmium and selenium in an inorganic crystalline form. Dispose of the material in compliance with all applicable local, state, and federal regulations for disposal of these classes of material. For more information on the composition of these materials, consult the Safety Data Sheets (SDSs).

Product Images For CD14 Monoclonal Antibody (TuK4), Qdot™ 800



CD14 Antibody (Q10064) in Flow
Qdot® 800 anti-human CD14 conjugate 780/60 band pass filter

8 References

Flow Cytometry (6)

Immunity

Distinct immunological signatures discriminate severe COVID-19 from non-SARS-CoV-2-driven critical pneumonia.

"Q10064 was used in Flow Cytometry to identify pathological immune signatures suggestive of T cell exhaustion unique to COVID-19 infection."

Authors: Kreutmair S,Unger S,Núñez NG,Ingelfinger F,Alberti C,De Feo D,Krishnarajah S,Kauffmann M,Friebel E, Babaei S,Gaborit B,Lutz M,Jurado NP,Malek NP,Goepel S,Rosenberger P,Häberle HA,Ayoub I,Al-Hajj S,Nilsson J, Claassen M,Liblau R,Martin-Blondel G,Bitzer M,Roquilly A,Becher B

Year 2021

Species Human

Cell reports. Medicine

Immune cell phenotypes associated with disease severity and long-term neutralizing antibody titers after natural dengue virus infection.

"Q10064 was used in Flow Cytometry to reveal associations between cellular profiles and disease severity, opening opportunities to study immunopathology in dengue disease and the potential predictive value of these parameters."

Authors: Rouers A,Chng MHY,Lee B,Rajapakse MP,Kaur K,Toh YX,Sathiakumar D,Loy T,Thein TL,Lim VWX,Singhal A, Yeo TW,Leo YS,Vora KA,Casimiro D,Lim B,Tucker-Kellogg L,Rivino L,Newell EW,Fink K

Year 2021

Species Human

View more Flow references on thermofisher.com

Miscellaneous PubMed (2)

Vaccine

Ki-67 expression reveals strong, transient influenza specific CD4 T cell responses after adult vaccination.

"Q10064 was used in flow cytometry to study influenza-specific CD4 T cells respond to vaccination using Ki67 as a marker."

Authors: Li X,Miao H,Henn A,Topham DJ,Wu H,Zand MS,Mosmann TR

Year 2012

Species Human

Vaccine

CD8+ T cell immunity to 2009 pandemic and seasonal H1N1 influenza viruses.

"Q10064 was used in flow cytometry to examine human cross-reactive T cells against a pandemic virus."

Authors: Scheible K,Zhang G,Baer J,Azadniv M,Lambert K,Pryhuber G,Treanor JJ,Topham DJ

Year 2011

Species Human

More applications with references on thermofisher.com