CD4 Monoclonal Antibody (S3.5), Qdot 655

Product Details	
Size	100 µL
Species Reactivity	Human
Published Species	Human
Host/Isotope	Mouse / IgG2a
Class	Monoclonal
Type	Antibody
Clone	S3.5
Conjugate	Qdot® 655
Immunogen	Human CD4
Form	Liquid
Purification	purified
Storage buffer	0.05M borate, pH 8.3, with 1M betaine
Contains	0.05% sodium azide
Storage Conditions	4° C
RRID	AB_11180600

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	Assay Dependent	7 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

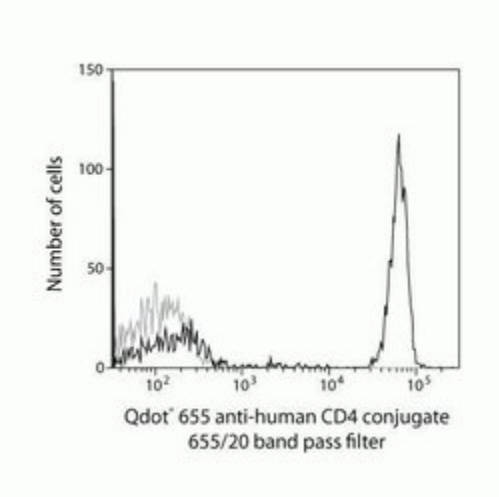
QdotTM Antibody (Ab) conjugates possess a bright fluorescence emission that makes them well suited for the detection of low-abundance extracellular proteins. Approximately the same size as R-phycoerythrin (R-PE) and compatible with existing organic fluorophore conjugates, QdotTM Ab conjugates can be 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 and 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. The isotype control for this antibody is mouse IgG2a, Cat. No. Q10015.

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. Q10007: peak excitation 405 (488) nm/peak emission 655 nm; recommended filter 655/20 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 CD4 Monoclonal Antibody (S3.5), Qdot 655



CD4 Antibody (Q10007) in Flow
Qdot® 655 anti-human CD4 conjugate 655/20 band pass filter

8 References

Flow Cytometry (7)

Microbes and infection

T cell phenotypes in women with Chlamydia trachomatis infection and influence of treatment on phenotype distributions.

"Q10007 was used in Flow cytometry/Cell sorting to evaluate differences in T cell phenotypes between Chlamydia trachomatis(CT)-infected women and CT-seronegative controls and investigate changes in T cell phenotype distributions after CT treatment and their association with reinfection."

Authors: Ogendi BMO,Bakshi RK,Gupta K,Kapil R,Brown LT,Jordan SJ,Sabbaj S,Press CG,Lee JY,Geisler WM

Species
Human

Dilution
Not Cited

Year
2018

American journal of reproductive immunology (New York, N.Y. : 1989)

Distinct peripheral vs mucosal T-cell phenotypes in chlamydia-infected women.

"Q10007 was used in Flow cytometry/Cell sorting to characterise the distinct peripheral and mucosal T-cell phenotypes in chlamydia-infected women."

Authors: Ogendi BMO,Bakshi RK,Sabbaj S,Brown L,Lee JY,Kapil R,Geisler WM

Species
Human

Dilution
Not Cited

Year
2017

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Miscellaneous PubMed (1)

PloS one

Heterogeneity of multifunctional IL-17A producing S. Typhi-specific CD8+ T cells in volunteers following Ty21a typhoid immunization.

"Q10007 was used in flow cytometry to explore the multifunctional IL-17A responses against S. Typhi antigens in T memory subsets."

Authors: McArthur MA,Sztein MB

Species
Human

Dilution
Not Cited

Year
2012

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