CD284 (TLR4) Monoclonal Antibody (UT41), Super Bright™ 436, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	UT41
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 nm
Form	Liquid
Concentration	0.2 mg/mL
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_2802416

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	3 Publications

Product Specific Information

Description: The UT41 monoclonal antibody was generated against BaF3 cells overexpressing mouse TLR4. So far, at least twelve members of the Toll family have been identified. This family of type I transmembrane protein is characterized by an extracellular domain with leucine-rich repeats and a cytoplasmic domain with homology to the type I IL-1 receptor. Two of these receptors, TLR2 and TLR4, are pattern recognition receptors and signaling molecules in response to bacterial lipoproteins and have been implicated in innate immunity and inflammation. TLR4 physically associates with another molecule called MD-2, and together with CD14, this complex is responsible for LPS recognition and signaling. TLR4, which is approximately 100 kDa, is expressed by myeloid lineage cells.

The MTS510 monoclonal antibody co-immunoprecipitates MD-2 (~30 kDa) and TLR4 (~100 kDa), and preferentially reacts with TLR4 that is associated with MD-2. In comparison, binding of the UT41 monoclonal antibody occurs with and without formation of the TLR4/MD-2 complex.

Applications Reported: This UT41 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This UT41 antibody has been tested by flow cytometric analysis of mouse thioglycolate-elicited peritoneal exudate cells. This may be used at less than or equal to 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

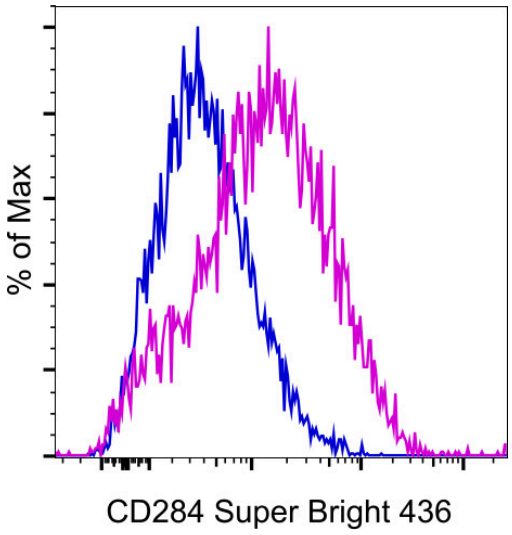
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

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.

Excitation: 405 nm; Emission: 436 nm; Laser: Violet Laser

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

Product Images For CD284 (TLR4) Monoclonal Antibody (UT41), Super Bright™ 436, eBioscience™



CD284 (TLR4) Antibody (62-9041-80) in Flow
C57BL/6 mouse thioglycolate-elicited peritoneal exudate cells were stained with 0.25 µg of Mouse IgG1 kappa Isotype Control, Super Bright 436 (Product # 62-4714-82) (blue histogram) or 0.25 µg of CD284 (TLR4) Monoclonal Antibody, Super Bright 436 (purple histogram). Total cells were used for analysis.

View more figures on thermofisher.com

3 References

Flow Cytometry (3)

Cell death discovery

Erlotinib protests against LPS-induced parthanatos through inhibiting macrophage surface TLR4 expression.

"Published figure using CD284 (TLR4) monoclonal antibody (Product # 62-9041-82) in Flow Cytometry"

Authors: Xue Q,Liu X,Chen C,Zhang X,Xie P,Liu Y,Zhou S,Tang J

Year
2021

PloS one

Advanced glycation end-products reduce lipopolysaccharide uptake by macrophages.

"Published figure using CD284 (TLR4) monoclonal antibody (Product # 62-9041-82) in Flow Cytometry"

Authors: Kitaura A,Nishinaka T,Hamasaki S,Hatipoglu OF,Wake H,Nishibori M,Mori S,Nakao S,Takahashi H

Year
2021

View more Flow references on thermofisher.com