VSIG4 Monoclonal Antibody (NLA14), Super Bright™ 436, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	NLA14
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 nm
Immunogen	Fc protein and C6 cells
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_2802410

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1.0 µg/test	3 Publications

Product Specific Information

Description: This NLA14 monoclonal antibody recognizes mouse V-Set and Immunoglobulin domain containing 4 (VSIG4), also known as Complement Receptor of the Immunoglobulin superfamily (CRIg) or Z39Ig. VSIG4 is a type I transmembrane glycoprotein structurally related to the B7 family of immune regulatory proteins. It contains one complete V-type Ig domain and one truncated C-type Ig domain. VSIG4 is exclusively expressed on tissue resident and tumor infiltrating macrophages. It has been shown to bind complement components C3b and iC3b. This binding inhibits the alternative complement pathway and facilitates phagocytosis of complement-opsonized pathogens. VSIG4 has also been reported to suppress T cell activation, proliferation and IL-2 production thereby playing a role in the maintenance of peripheral T cell tolerance and suppression of established inflammation. Expression of VSIG4 on tumor-infiltrating macrophages suggests its role in immune evasion. Pro-inflammatory stimuli such as TNF and LPS have been reported to down-regulate the expression of VSIG4. Peritoneal macrophages in Balb/c mice express significantly higher levels of VSIG4 than such macrophages in C57Bl/6 or Swiss Webster mice.

The NLA14 antibody will recognize VSIG4 on cells that have been formaldehyde-fixed and permeabilized. This antibody does not block the ligation of VSIG4 to its T cell ligand. The NLA14 antibody does not cross-react with rat or human VSIG4.

Applications Reported: This NLA14 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This NLA14 antibody has been tested by flow cytometric analysis of mouse peritoneal exudate cells. This may be used at less than or equal to 1 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.

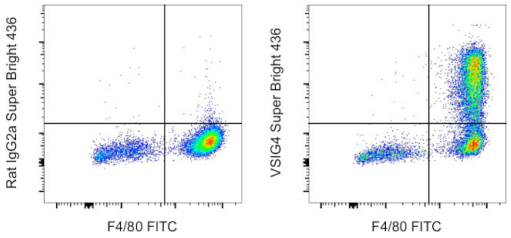
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

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 VSIG4 Monoclonal Antibody (NLA14), Super Bright™ 436, eBioscience™



VSIG4 Antibody (62-5752-80) in Flow
Swiss Webster mouse resident peritoneal macrophages were stained with F4/80 Monoclonal Antibody, FITC (Product # 11-4801-82) and 0.5 µg of Rat IgG2a kappa Isotype Control, Super Bright 436 (Product # 62-4321-82) (left) or 0.5 µg of VSIG4 Monoclonal Antibody, Super Bright 436 (right). Total cells were used for analysis.

View more figures on thermofisher.com

3 References

Flow Cytometry (3)

Cell

Spatial proteogenomics reveals distinct and evolutionarily conserved hepatic macrophage niches.

"Published figure using VSIG4 monoclonal antibody (Product # 62-5752-82) in Flow Cytometry"

Authors: Guilliams M,Bonnardel J,Haest B,Vanderborght B,Wagner C,Remmerie A,Bujko A,Martens L,Thoné T, Browaeys R,De Ponti FF,Vanneste B,Zwicker C,Svedberg FR,Vanhalewyn T,Gonçalves A,Lippens S,Devriendt B,Cox E,Ferrero G,Wittamer V,Willaert A,Kaptein SJF,Neyts J,Dallmeier K,Geldhof P,Casaert S,Deplancke B,Ten Dijke P, Hoorens A,Vanlander A,Berrevoet F,Van Nieuwenhove Y,Saeys Y,Saelens W,Van Vlierberghe H,Devisscher L,Scott CL

Year
2022

STAR protocols

Comprehensive analysis of liver macrophage composition by flow cytometry and immunofluorescence in murine NASH.

"Published figure using VSIG4 monoclonal antibody (Product # 62-5752-82) in Flow Cytometry"

Authors: Daemen S,Chan MM,Schilling JD

Year
2021

View more Flow references on thermofisher.com