

VSIG4 Monoclonal Antibody (NLA14), Super Bright™ 600, 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™ 600, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | NLA14 |
| Conjugate | Super Bright™ 600 |
| Excitation/Emission Max | 414/601 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_2802436 |

| Applications | Tested Dilution | Publications |
|-----------------------|-----------------|----------------|
| Flow Cytometry (Flow) | 1.0 µg/test | 4 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 1.0 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 μ L. 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 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend using a 610/20 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.

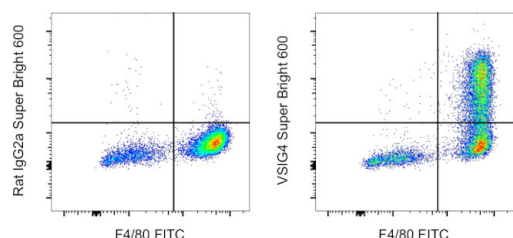
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) 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: 600 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™ 600, eBioscience™



VSIG4 Antibody (63-5752-80) in Flow

Swiss Webster mouse resident peritoneal macrophages were stained with F4/80 Monoclonal Antibody, FITC (Product # 11-4801-82) and 0.5 μ g of Rat IgG2a kappa Isotype Control, Super Bright 600 (Product # 63-4321-82) (left) or 0.5 μ g of VSIG4 Monoclonal Antibody, Super Bright 600 (right). Total cells were used for analysis.

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

4 References

Flow Cytometry (4)

Frontiers in immunology

Gut lumen-leaked microbial DNA causes myocardial inflammation and impairs cardiac contractility in ageing mouse heart.

Year
2023

"Published figure using VSIG4 monoclonal antibody (Product # 63-5752-82) in Flow Cytometry"

Authors: Gao H,Wang K,Suarez JA,Jin Z,Rocha KCE,Zhang D,Farrell A,Truong T,Tekin Y,Tan B,Jung HS,Kempf J, Mahata SK,Dillmann WH,Suarez J,Ying W

Cell

Spatial proteogenomics reveals distinct and evolutionarily conserved hepatic macrophage niches.

Year
2022

"Published figure using VSIG4 monoclonal antibody (Product # 63-5752-82) 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,Berreoet F, Van Nieuwenhove Y,Saeyns Y,Saelens W, Van Vlierberghe H,Devisscher L,Scott CL

[View more Flow references on thermofisher.com](#)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.