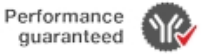


VSIG4 Monoclonal Antibody (JAV4), Super Bright 436, eBioscience™



Catalog Number 62-5757-42

Product Data Sheet

Details		Species Reactivity	
Size	100 Tests	Tested species reactivity	Human
Host / Isotype	Mouse IgG2a, kappa	Tested Applications	Dilution *
Class	Monoclonal	Flow Cytometry (Flow)	5 µL (0.125 µg)/test
Type	Antibody	* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.	
Clone	JAV4		
Conjugate	Super Bright 436		
Form	Liquid		
Concentration	5µl/Test		
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!		

Product Specific Information

Description: This JAV4 monoclonal antibody recognizes human V-Set and Immunoglobulin domain containing 4 (VSIG4), also known as Complement Receptor of the Immunoglobulin superfamily (CR1g) or Z39lg. There are two variants of human VSIG4 that result from alternative splicing. Isoform 1 is longer and more prevalent than isoform 2, and this JAV4 antibody recognizes both. 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.

The JAV4 antibody will recognize VSIG4 on cells that have been formaldehyde-fixed and permeabilized. This antibody does not cross-react with mouse or rat VSIG4.

Applications Reported: This JAV4 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This JAV4 antibody has been pre-diluted and tested by flow cytometric analysis of human monocyte-derived macrophages. This may be used at 5 µL (0.125 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 10⁵ to 10⁸ cells/test.

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 Staining Buffer (Product # SB-4400-42) 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

Background/Target Information

T cell activation by APCs is positively and negatively regulated by members of the B7 family. VSIG4 is a strong negative regulator of murine and human T cell proliferation and IL-2 production.

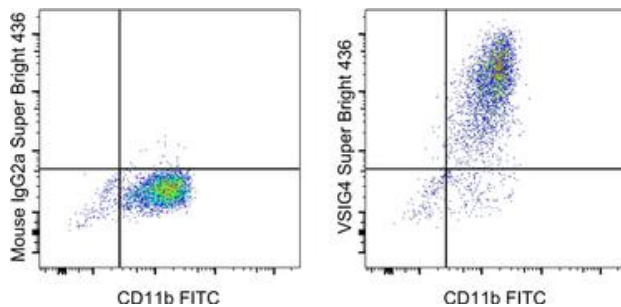
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Product Images for VSIG4 Monoclonal Antibody (JAV4), Super Bright 436, eBioscience™

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Human monocyte-derived macrophages were stained with CD11b Monoclonal Antibody, FITC (Product # 11-0118-42) and Mouse IgG2a kappa Isotype Control, Super Bright 436 (Product # 62-4724-82) (left) or VSIG4 Monoclonal Antibody, Super Bright 436 (right). Total viable cells were used for analysis, as determined by Fixable Viability Dye eFluor 780 (Product # 65-0865-18).

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