

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human VSIG3 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 774208
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human VSIG3 Met1-Gly245 Accession # Q5DX21
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CytoF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
ELISA	This antibody functions as an ELISA capture antibody when paired with Sheep Anti-Human/Mouse VSIG3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4915). <i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human VSIG3 DuoSet ELISA Kit (Catalog # DY9229-05) for convenient development of a sandwich ELISA.</i>	

DATA

<p>Flow Cytometry</p> <p>Detection of VSIG3 in HEK293 Human Cell Line Transfected with Human VSIG3 and eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with either (A) human VSIG3 or (B) irrelevant transfectants and eGFP was stained with Mouse Anti-Human VSIG3 Monoclonal Antibody (Catalog # MAB9229) followed by APC-conjugated Goat-anti Mouse IgG secondary antibody (Catalog # F0101B). Quadrant markers were set based on control antibody staining (Catalog # MAB002). View our protocol for Staining Membrane-associated Proteins.</p>	<p>ELISA</p> <p>Human VSIG3 ELISA Standard Curve. Recombinant Human VSIG3 protein was serially diluted 2-fold and captured by Mouse Anti-Human VSIG3 Monoclonal Antibody (Catalog # MAB9229) coated on a Clear Polystyrene Microplate (Catalog # DY990). Sheep Anti-Human/Mouse VSIG3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4915) was biotinylated and incubated with the protein captured on the plate. Detection of the standard curve was achieved by incubating Streptavidin-HRP (Catalog # DY998) followed by Substrate Solution (Catalog # DY999) and stopping the enzymatic reaction with Stop Solution (Catalog # DY994).</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

VSIG3 (V-set and Ig domain-containing protein 3; also BT-IgSF and IGSF11) is a 52 kDa brain and testis-specific protein that belongs to the IGSF11 family of proteins. It is expressed by neurons, astrocytes and oligodendroglia. VSIG3 is an adhesion molecule that forms Ca-independent homophilic interactions in trans. Human VSIG3 is 413 amino acids (aa) in length. It is a type I transmembrane glycoprotein that contains a 219 aa extracellular domain (ECD). The ECD contains one V-type (aa 23-136) and one C2-type Ig-like domain (aa 144-234). Over aa 23-245, human VSIG3 is 94% aa identical to mouse VSIG3. Two potential splice variants exist in human. Both exhibit a 16 aa substitution for the first 17 aa of the signal sequence, and one contains an additional single Ala substitution for aa 211-235.