

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human VSIG1 in ELISAs. In direct ELISAs, no cross-reactivity with recombinant mouse VSIG1 or recombinant human VSIG2, 3, or 4 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 771506
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human VSIG1 Val22-Gly234 Accession # Q86XK7
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.

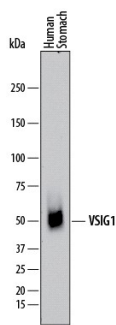
APPLICATIONS

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
Western Blot	2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Simple Western	100 µg/mL	See Below

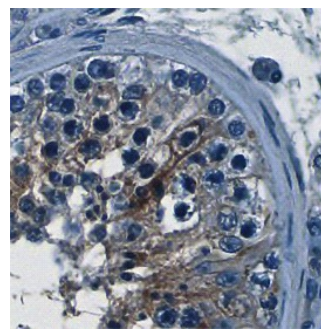
DATA

Western Blot



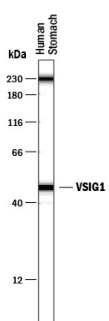
Detection of Human VSIG1 by Western Blot. Western blot shows lysates of human stomach tissue. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human VSIG1 Monoclonal Antibody (Catalog # MAB4818) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for VSIG1 at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



VSIG1 in Human Testis. VSIG1 was detected in immersion fixed paraffin-embedded sections of human testis using Mouse Anti-Human VSIG1 Monoclonal Antibody (Catalog # MAB4818) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membranes in spermatocytes. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Simple Western



Detection of Human VSIG1 by Simple Western™. Simple Western lane view shows lysates of human stomach tissue, loaded at 0.5 mg/mL. A specific band was detected for VSIG1 at approximately 48 kDa (as indicated) using 100 µg/mL of Mouse Anti-Human VSIG1 Monoclonal Antibody (Catalog # MAB4818). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system. Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

VSIG1 (V-set and Ig domain-containing protein 1; also Glycoprotein A34) is a variably glycosylated 55-70 kDa member of the JAM family of proteins. It has restricted expression, being limited to testicular germ cells plus pancreatic duct and gastric epithelium. VSIG1 is likely to serve as an adhesion molecule. Mature human VSIG1 is 366 amino acids (aa) in length. It is a type I transmembrane glycoprotein that contains a 211 aa extracellular domain (ECD). The ECD contains one V-type (aa 22-132) and one C2-type Ig-like domain (aa 140-227). Over aa 22-234, human VSIG1 is 83% aa identical to both mouse and canine VSIG1. At least one potential splice variant exists in human. It shows an insertion of 36 aa after Ser72 and a deletion of aa 133-387.