



Anti-human/mouse VSIG3 Antibody

ORDERING INFORMATION

Catalog Number: AF4915

Lot Number: CBAD01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS
with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human and mouse VSIG3

Immunogen: NS0-derived rhVSIG3
(aa 23 - 245)

Ig Type: sheep IgG

Applications: Western blot
Direct ELISA

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.

Preparation

Produced in sheep immunized with purified, NS0-derived, recombinant human VSIG3 (rhVSIG3; aa 23 - 245; Accession # NP_001015887). Human VSIG3 specific IgG was purified by human VSIG3 affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for its ability to recognize VSIG3 in direct ELISAs and Western blots. In these formats, this antibody shows less than 1% cross-reactivity with rhVSIG1, rhVSIG2, and rhVSIG4.

Applications

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human and mouse VSIG3. The detection limit for rhVSIG3 and rmVSIG3 is approximately 5 ng/lane under non-reducing and reducing conditions.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human and mouse VSIG3. The detection limit for rhVSIG3 and rmVSIG3 is approximately 0.3 ng/well.

Optimal dilutions should be determined by each laboratory for each application.