Datasheet for 600-401-386

VSV-G Antibody

Overview

Description:	Anti-VSV-G Epitope Tag (RABBIT) Antibody - 600-401-386
Item No.:	600-401-386
Size:	100 µg
Applications:	ELISA, WB, IF, IHC, Other
Reactivity:	VSV-G-Tag
Host Species:	Rabbit

Product Details

Background:	Epitope tags are short peptide sequences that are easily recognized by tag-specific antibodies. Due to their small size, epitope tags do not affect the tagged protein's biochemical properties. Most often sequences encoding the epitope tag are included with target DNA at the time of cloning to produce fusion proteins containing the epitope tag sequence. This allows anti-epitope tag antibodies to serve as universal detection reagents for any tag containing protein produced by recombinant means. This means that anti-epitope tag antibodies are a useful alternative to generating specific antibodies to identify, immunoprecipitate or immunoaffinity purify a recombinant protein. The anti-epitope tag antibody is usually functional in a variety of antibody-dependent experimental procedures. Expression vectors producing epitope tag fusion proteins are available for a variety of host expression systems including bacteria, yeast, insect and mammalian cells. Rockland Immunochemicals produces anti-epitope tag antibodies against many common epitope tags including Myc, GST, GFP, 6X His, MBP, FLAG and HA. VSV-G or vesicular stomatitis virus glycoprotein is found within the pseudo lentiviral cloning vector pHCMV-VSV-G.
Synonyms:	Rabbit Anti-VSV-G Epitope Tag Antibody, Rabbit Anti VSV-G Epitope Tag Antibody, Rabbit Anti-VSV-G Tag Antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	VSV-G-Tag

Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding aa 501-511 of vesicular stomatitis virus glycoprotein (VSV-G).
Purity/Specificity:	This affinity purified antibody is directed against VSV-G protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification.

Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	IF, IHC, Other (Based on references)
Application Note:	This affinity purified antibody has been tested for use in ELISA and western blot. This product is suitable for immunofluorescence microscopy. Specific conditions for reactivity should be optimized by the end user. For standard indirect immunofluorescence assay we recommend paraformaldehyde fixation with detergent permeabilization of cells infected with VSV or transfected with the wild-type VSV-G protein. Staining is quite clean and specific for both sources of the G protein when diluted at least 1/200. At higher concentrations, a filamentous background staining may be present.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:50,000 - 1:100,000
IF:	1:200 - 1:500
IHC:	1:200 - 1:500
WB:	1:1,000 - 1:5,000

Formulation

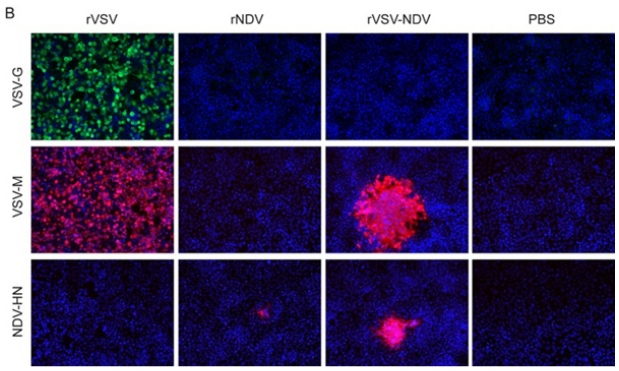
Physical State:	Liquid (sterile filtered)
Concentration:	1.19mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

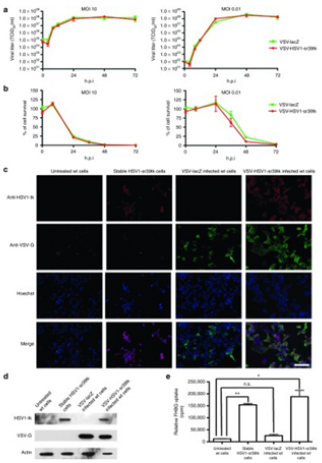
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

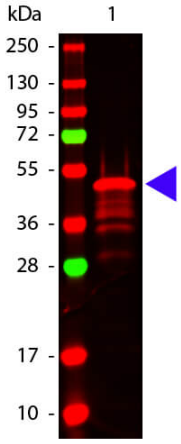
Images



Immunofluorescence Microscopy
(B) Expression of viral genes was confirmed by indirect immunofluorescence analysis. Huh7 cells were mock infected or infected with rVSV or rNDV or rVSV-NDV at an MOI of 0.001 for 24 h. Immunofluorescence analysis was performed using primary antibodies against VSV-G, VSV-M, or NDV-HN and the appropriate fluorescence-labeled secondary antibodies. Cells were counterstained with DAPI (4',6-diamidino-2-phenylindole) for localization of nuclei. Representative fields of view are shown at ×400 magnification. Fig 1. PMID: 30232179



Immunofluorescence Microscopy
In vitro characterization of the HSV1-sr39tk reporter. (a) One-step (left panel) and multistep (right panel) growth curves of rVSV-lacZ (green) and rVSV-HSV1-sr39tk (red) in cultured rat HCC cells after an infection at either MOI 10 (one-step) or MOI 0.01 (multistep). Supernatants were collected at different hours postinfection (h.p.i.), and titer was determined by TCID50 assay on BHK cells. (b) Cell survival assay of rat HCC cells after an infection at either MOI 10 (left panel) or MOI 0.01 (right panel) by MTS assay. (c) Indirect immunofluorescence of cultured cells and (d) Western Blot of whole cell lysates of untreated wt rat HCC cells, stably HSV1-sr39tk–expressing rat HCC cells and either VSV-lacZ or VSV-HSV1-sr39tk–infected rat HCC cells. Microscopy has been performed at a magnification of 20×, and scale bar refers to 100 µm. (e) In vitro 18F-FHBG tracer uptake of same samples as mentioned for c and d. All quantitative data represents the mean of triplicate samples ± SEM. Stars indicate significance with P values lower than 0.0001 (**) and lower than 0.0005 (*). Fig 1.
PMID: 25609160



Western Blot

Western Blot of Rabbit anti-VSV-G antibody. Lane 1: 12 Epitope Tag Protein Marker Lysate - MB-301-0100. Load: ~10 µg per lane. Primary antibody: VSV-G antibody at 1:1,000 for overnight at 4°C. Secondary antibody: DyLight™ 649 rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 3% BSA-TBS 2H at RT. Predicted/Observed size: ~50 kDa for VSV-G. Other band(s): VSV-G splice variants and isoforms.

References

- Hof, DJ et al. A versatile salt-based method to immobilize glycosaminoglycans and create growth factor gradients. *Glycoconjugate Journal* (2019)
- Abullahi S et al. A novel chimeric oncolytic virus vector for improved safety and efficacy as a platform for the treatment of hepatocellular carcinoma. *J Virol.* (2018)
- Uijtdewiligen PJE et al. Towards embryonic-like scaffolds for skin tissue engineering: identification of effector molecules and construction of scaffolds. *J Tissue Eng Regen Med.* (2016)
- Muñoz-Álvarez et al. PET imaging of oncolytic VSV expressing the mutant HSV-1 thymidine kinase transgene in a preclinical HCC rat model. *Molecular Therapy* (2015)

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