ALPHA DIAGNOSTIC INTERNATIONAL

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Product Specification Sheet

Anti-VSV (fusion tag) Antibodies

Cat. # VSV12-A Rabbit Anti-VSV-G IgG aff pure **SIZE:** 100 ug

Expression of genes in E. coli or yeast or baculovirus offers a convenient system to produce large amounts of recombinant proteins that may otherwise be difficult to isolate from natural cells and tissues. Very often antibodies to these newly identified proteins are not available to study its biochemical properties, monitor protein expression, and purification. In order to circumvent this problem, short pieces of well-defined peptides (Poly-His, Flag-epitope or c-myc epitope or HA-tag) or small proteins (bacterial GST, MBP, Thioredoxin, b-Galactosidase, VSV-Glycoprotein etc) are often cloned along with the target gene. Proteins are expressed as fusion proteins. Antibodies to these fusion-tags are already available to monitor fusion protein expression and purification. Therefore, fusion-tags serve as universal tags much like secondary antibodies. Many tags have their own characteristics. Poly-His-fusion proteins (6 x His) can bind to Nickel-Sepharose or Nickel-HRP. GST-fusion proteins can bind to glutathione-Sepharose. Therefore, a high degree of purification of fusion protein can be achieved in just one affinity purification step. Purity of fusion proteins can be followed by Tag-antibodies. Very often, fusion proteins are directly injected into animals to generate antibodies. Some fusion tags can be removed later by treatment with enzymes to generate tag-free recombinant proteins.

Source of Antigen and Antibodies

Antigen	a synthetic peptide containing 15-aa peptide (YTD IEM NRL GK; 495-511 aa) (**Cat # VSV11-P, control peptide**) from the C-terminus of VSV (vesicular Stomatitis virus glycoprotein (VSV-G) (1) coupled to KLH
Ab Host/type	Rabbit, Polyclonal IgG, purified over antigen-agarose (Cat # **VSV11**-A)
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
-ve control IgG	Cat # 20009-1, Rabbit (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as –ve control

VSV12-A Suggested antibody Dilutions

Western 1:1K-:10K; ELISA:1:5K-:20K

Antibody concentration must be optimized for each application under defined experimental conditions.

Specificity of antibodies

Rabbit anti-VSV (VSV12-A) specifically localized the immature form of the VSV-G in the RER and in the cisternae of golgi complex, as well as mature VSV-G at the surface and in the budding virus. The antibody does not stain the secreted form of VSV-G which lacks the membrane and the cytoplasmic domain. The antibodies detect both the native and denatured forms of VSV-G epitope containing fusion proteins.

Purified protein containing the T-7 tag **(#MFPM20-C**) can be used as positive control for ELISA or Western.
A purified protein (~20 Kda) containing 5-major tags in tandem: His-Tag (G-H-H-H-H-H-H), T7-Tag (M-A-S-M-T-G-G-Q-Q-M-G), Myc-Tag (E-Q-K-L-I-S-E-E-D-L), HA-Tag (Y-P-Y-D-V-P-D-Y-A), VSV-G-Tag (Y-T-D-I-E-M-N-R-L-G-K) Followed by protein core

General References:

Soldati T et al (1991) Cell 66, 277; Kries TE et al (1986) Cell 46, 929; Kries TE et al (1986) EMBO J 5, 931.

*This product is for In vitro research use only.

Other Fusion tag antibodies available from ADI

Catalog#	ProdDescription
VSV11-Cy	Monoclonal Anti-VSV-G-Cy conjugate for Immunofluorescence
VSV11-HRP	Monoclonal Anti-VSV-IgG-HRP conjugate
VSV11-M	Monoclonal VSV-Glycoprotein (fusion-tag) antibody,
VSV12-A	Anti-VSV-IgG, aff pure

Anti-MBP, Poly-His, GST, beta-Gal, VSV-G, Flag, HA-tag, and c-myc

VSV12-A 71216A