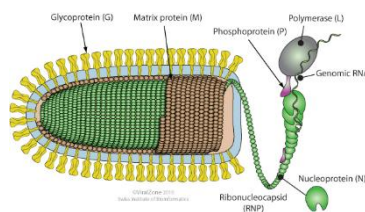


Product Specification Sheet

Vesicular Stomatitis Virus Matrix protein, Indiana (VSV-I M) Antibodies and conjugates

□ Cat. # VSIM12-S	Rabbit Anti-Vesicular Stomatitis Indiana Virus Matrix Protein, Indiana (VSV-I M) Antiserum	SIZE: 100 ul
□ Cat. # VSIM12-C	Recombinant (E. Coli) Vesicular Stomatitis Virus Matrix Protein, Indiana (VSV-I M) Protein	SIZE: 100 ul

Vesicular stomatitis is a viral disease caused by two distinct serotypes of **vesicular stomatitis virus (VSV) —New Jersey (VSNJV or VSV-NJ) and Indiana (VSIV or VSV-I)**. Vesiculation, ulceration, and erosion of the oral and nasal mucosa and epithelial surface of the tongue, coronary bands, and teats are typically seen in clinical cases, along with crusting lesions of the muzzle, ventral abdomen, and sheath. Clinical disease has been seen in cattle, horses, and pigs and very rarely in sheep, goats, and llamas. Serologic evidence of exposure has been found in many species, including cervids, nonhuman primates, rodents, birds, dogs, antelope, and bats. The clinical symptoms are similar to the very important foot and mouth disease virus (FMDV).



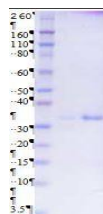
The viruses are members of the family Rhabdoviridae and genus Vesiculovirus. VSV are the prototypes of the Vesiculovirus genus. They are bullet shaped and generally 180 nm long and 75 nm wide. The

genomic structure is a single strand of negative-sense RNA (11.1 kb) composed of five genes (N, P, M, G, and L, representing the nucleocapsid protein, phosphoprotein, matrix protein, glycoprotein, and the large protein, which is a component of the viral RNA polymerase). The G protein mediates both viral binding and host cell fusion with the endosomal membrane following endocytosis. The L and P proteins are subunits of the viral RNA-dependent RNA polymerase. Although there are many members of the Vesiculovirus genus, the New Jersey and Indiana serotypes are of particular interest in the Western hemisphere. These two viruses are similar in size and morphology but generate distinct neutralizing antibodies in infected animals.

The simple structure and rapid high-titer growth of VSV in mammalian and many other cells has made it a useful tool in the fields of cellular, molecular biology, virology, and a shuttle vector for many vaccines such HIV, Ebola, etc.

Source of Antigen and Antibodies

Antigen	Recombinant (E. coli) purified full length ectodomain of VSV-I M
Ab Host/type	Rabbit, Polyclonal antiserum-agarose (Cat # VSIM12-S) supplied in PBS/0.1% azide
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



VSV-I M protein (2-229, complete extracellular domain, ~29.5 kDa) was expressed as His-tag (NT) protein and purified (>95%). For Western blot +ve control (Cat # **VSIM12-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **VSIM12-C** for good visibility with antibody Cat # **VSVIM12-S**. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before

taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **VSVIM12-C** solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

Form & Storage of Antibodies/Peptide Control

Antiserum
 100 ul solution lyophilized powder
 Buffer: PBS+0.05% azide **Reconstitute powder** 100 ul of water.

Storage
Short-term: unopened, undiluted vials for less than a week at 4oC.
Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.
Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting: An initial dilution of 1:500-2K is recommended for Western. Users must optimize antibody dilution depending upon the nature of samples and other technical conditions.
ELISA (1:10-50K; using 50-100 ng antigen/well).

Histochemistry & Immunofluorescence: not tested.

Specificity: This antibody reacts with VSV-I M with little crossreactivity with VSV-NJ matrix protein. Recombinant (E. coli), full length, highly purified (>95%) VSV Indiana strain, Matrix protein (M) is used in the kit as antigen. It is 60% conserved in the VSV New Jersey strain. VSV Chandipura Virus shows only 30% conservation with the Indian Matrix protein.. VSV-I M antibody crossreactivity with these virus's GP have not been studied.

References: Rose JK (1981) J. Virol. 39, 519-528; Colonna RJ (1978) Cell 15, 93-101; McGeoh DJ (1979) Cell 17, 673-681;
 *This product is for In vitro research use only.

Related Items

- VSIG11-S Anti-Vesicular Stomatitis Indiana Virus Glycoprotein, Indiana, (VSV-I G) Antiserum
- VSIG15-R-10 Recombinant (E. Coli) Vesicular Stomatitis Virus Matrix Protein, Indiana (VSV-I M), his-tag, ~54 kDa; >95% Pure
- VSIM12-S Rabbit Anti-Vesicular Stomatitis Indiana Virus Matrix Protein, Indiana (VSV-I M) Antiserum
- VSIM16-R-10 Recombinant (E. Coli) Vesicular Stomatitis Virus Matrix Protein, Indiana, (VSV-I M) his-tag, ~29.5 kDa; >95% Pure
- VNSG13-S Rabbit Anti-Vesicular Stomatitis Virus Glycoprotein, New Jersey (VSV-NG) Antiserum
- VNSG17-R-10 Recombinant (E. Coli) Vesicular Stomatitis Virus Glycoprotein, New Jersey (VSV-NG), his-tag, ~55.1 kDa; >95% Pure
- VSV11-Cy Monoclonal Anti-Vesicular Stomatitis Virus Glycoprotein (VSV-G)-Cy conjugate for Immunofluorescence
- VSV11-HRP Monoclonal Anti-Vesicular Stomatitis Virus Glycoprotein (VSV)-IgG-HRP conjugate
- VSV11-M Monoclonal Vesicular Stomatitis Virus Glycoprotein (VSV) Glycoprotein (fusion-tag) antibody, ascites
- VSV12-A Anti-Vesicular Stomatitis Virus Glycoprotein (VSV)-IgG, aff pure
- VSIM12-S-Rabbit-Anti-VSV-Indiana-Matrix protein-Antiserum 150623C

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