

Product Specification Sheet

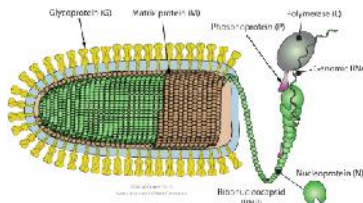
**Recombinant Vesicular Stomatitis Virus Glycoprotein, Indiana (VSV-I G)**

– **Cat. # VSIG15-R**

Recombinant (E. Coli) Vesicular Stomatitis Virus Glycoprotein, Indiana his-tag, ~54 kDa; >95% Pure (VSV-I G),

**SIZE:** 10 ug

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).



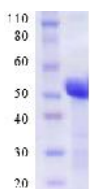
The viruses are members of the family Rhabdoviridae and genus Vesiculovirus. VSV are the prototypes of the Vesiculovirus genus. They are bullet shaped and generally 180 nm long and 75 nm wide. The

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**

<b>Antigen</b>	Recombinant (E. coli) purified full length ectodomain of VSV-I GP
<b>Ab Host/type</b>	Rabbit, Polyclonal antiserum-agarose (Cat # <b>VSV1G11-S</b> ) supplied in PBS/0.1% azide
<b>2-Ab</b>	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
<b>-ve control IgG</b>	Cat # 20009-1, Rabbit (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control



Recombinant (E. Coli) Vesicular Stomatitis Virus Glycoprotein **cat#VSIG15-R-10** (17-467, complete extracellular domain, ~54 kDa) was expressed as His-tag (NT) protein and purified (>95%). Purified protein is supplied in 50mM Tris-HCl, 0.5mM EDTA, 5mM - Mercatoethanol, 0.25M NaCl, 8M Urea and 0.25M Imidazole (see lot sp. Conc. on the vial)

**Storage**

**Short-term:** unopened, undiluted vials for less than a week at 4oC.

**Long-term:** at –20oC 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 GP with little crossreactivity with VSV-NJ glycoprotein. VSV-GPs, Indiana and NJ are about 51% conserved at the protein level. VSV-I G is conserved 78% in Maraba virus, Cocal virus (72%), and Alagoas virus (63%) GPs. VSV-I G 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
- 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
- VSNG13-S Rabbit Anti-Vesicular Stomatitis Virus Glycoprotein, New Jersey (VSV-NG) Antiserum
- VSNG17-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

VSIG15-R-10 Recombinant (E. Coli) Vesicular Stomatitis Virus Glycoprotein, Indiana (VSV-I G), his-tag, ~54 kDa; >95% Pure

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