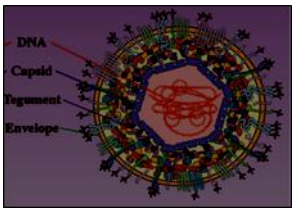
ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Cat # PSRVGB11-S	Rabbit Anti-Pseudorabies Virus glycoprotein B (PsRV gB) antiserum	SIZE:100 ul
Cat # PSRVGB11-C	Purified Pseudorabies Virus glycoprotein B (PsRV gB) control for western blot	SIZE:100 ul



Pseudorabies (false rabies) is a viral disease in swine that is endemic in most parts of the world. It is caused by Suid herpesvirus 1 (SuHV-1), which is also called pseudorabies virus (PRV pr PsRV) and is also known as Aujeszky's disease, and in cattle as mad itch. Pseudorabies is related to the herpes virus, not the rabies virus. PRV is considered to be the most economically important viral disease of swine in areas where hog cholera has been eradicated. Populations of wild boar, or feral hogs (Sus scrofa), in the US commonly contract and spread the virus throughout their range. Mortality is highest in young piglets. Pregnant sows often abort when infected. Otherwise healthy male adults (boars) are typically latent carriers, that is, they harbor and transmit the virus without displaying symptoms or suffering disability. Other domestic and wild mammals, such as cattle, sheep, goats, cats, dogs, rodents, and raccoons, are also susceptible. The disease is usually fatal in these hosts. PsRV is especially prominent in regions of South America, Asia and Europe with dense swine populations. There have been no reports of PsRV in Norway, Finland or Malta, and the disease has been eradicated from domestic pig populations in Germany, Austria, Sweden, Denmark, the United Kingdom, Canada, New Zealand, and the United States.

PsRV Genome is approximately 143 kbp. The mature PsRV virions, consists of four morphologically distinct structural components: the central core contains the linear dsDNA that is enclosed within a protective icosahedral capsid to form a nucleocapsid; the capsid is embedded in a protein matrix known as the tegument; finally, the tegument is surrounded by the envelope, a lipid membrane containing several viral glycoproteins. Nearly half of all the PsRV gene products are structural components of the mature virion. Surrounding the NC is the tegument, which consists of at least 14 proteins. The viral envelope contains at least 15 proteins, 11 of which are glycosylated (gII (gB), gIII (gC), gp50 (gD), gI (gE), gX (gG), gH, gp63 (gI), gK, gL, gM, and gN and correspond to similar proteins of Human Herpes simplex virus 1). Of these, gB, gD, gH, and gL are essential for virus replication. Other glycoproteins such as gE, gI, the tegument protein US9, and the nonstructural protein thymidine kinase (TK) are nonessential, but their presence correlates with virulence.

The virus is shed in the saliva and nasal secretions of infected swine and is spread through oral or nasal contact. Aerosolization of the virus and transmission by fomites also may occur. The virus may potentially survive for seven hours in humid air and spread up to two kilometers. Furthermore, it may survive on well water for up to seven hours, in green grass, soil, and feces for up to two days, in contaminated feed for up to three days, and in straw bedding for up to four days

Source of Antigen and Antibodies

Antigen	Recombinant purified PSRV glycoprotein B protein
Ab Host/type	Rabbit, Polyclonal antiserum (Cat# PSRVGB11-S) supplied in 0.1% azide as preservative.
2-Ab	Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control IgG	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

PSRVGB was expressed in E. Coli as his-tag fusion protein (full length, purity >95%, ~78.2 KDa). Purified PSRVGB protein for Western blot +ve control (**Cat #** PSRVGB11-C) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of # PSRVGB11-C for good visibility with antibody Cat # PSRVGB11-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 # PSRVGB11-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 + 0.1% azide

Reconstitute powder 100 ul of PBS.

Storage

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

Long-term: at -20°C 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. NOT TESTED

ELISA (1:10-50K; using 50-100 ng antigen/well).

Histochemistry & Immunofluorescence: not tested.

Specificity & Cross-reactivity

PSRVGB protein has significant protein sequence homology with related herpesviruses glycoprotein B: Suid herpesvirus 1 (94%), Canid, Caprine, Bovine, Feline (60-64%). Recombinant purified PSRVGB protein is available for control studies.

References: Pomeranz LM, (2005) Microbiol Mol Biol Rev 69 (3): 462–500; Pensaert M, (2004) Dev Biol (Basel) 119: 243–54; Kratchmarov R, (2013) PLOS ONE 8 (3): e58776.

*This product is for In vitro research use only.

Related material available from ADI

Catalog# Prod Description

AE-400415-RT-50 TruStrip Swine/Porcine Anti-pseudorabies virus (PsRV) antibody rapid test card for serum, plasma, whole blood (results in 2-10 mns), 50 tests/pk

PSRVGB11-C Purified Pseudorabies Virus glycoprotein B (PsRV gB) control for western blot
PSRVGB11-S Rabbit Anti-Pseudorabies Virus glycoprotein B (PsRV gB) antiserum
PSRVGB15-R-10 Recombinant (E.coli, his tag) Purified Pseudorabies Virus glycoprotein B (PsRV gB) (>95%)
RTA-2000-50 TruStrip Anti-pseudorabies virus antibody rapid test card

RV-400400-1 Recombivirus Porcine/Pig Pseudorabies Virus envelope glycoprotein B (PsRV gB) IgG ELISA kit, 96 tests
RV-400400-5 Recombivirus Porcine/Pig Pseudorabies Virus envelope glycoprotein B (PsRV gB) IgG ELISA kit, 5 x 96 tests

RV-400400-PNC Porcine Pseudorabies Virus glycoprotein B (PsRV gB) antibody negative serum
RV-400400-PPC Porcine Pseudorabies Virus glycoprotein B (PsRV gB) antibody positive serum

RV-400405-1 Recombivirus Porcine/Pig Pseudorabies Virus envelope glycoprotein E (PsRV gE) IgG ELISA kit (DIVA), 96 tests

PSRVGB11-S-antiserum rev.211101AC

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