ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Porcine Parvovirus (PPV-VP2) antibodies and controls

Cat.# PPVVP21-S	Rabbit Anti-Swine/Porcine Parvovirus (PPV) VP2 IgG antiserum	**SIZE:** 100 ul
Cat.# PPVVP21-C	Recombinant (*E.coli*) Swine/Porcine Parvovirus (PPV) VP2 protein control for western blot	**SIZE:** 100 ul

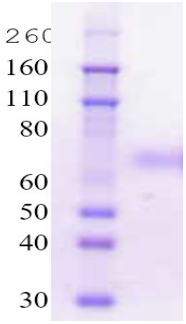
Porcine Parvovirus is also known as PPV. It is in Group II, a single stranded DNA, from the family Parvoviridae and its genus is Parvovirus. PPV is one of the most common causes of infectious infertility. It is a very strong virus which multiplies itself in the pig's intestine without giving the pig any symptoms. PPV is a very difficult virus to remove from the pig's environment. PPV has unique characteristics of being resistant to most disinfectants and being able to survive living outside of its host for a long period of time. PPV will show symptoms in pregnant pigs only if the pregnancy is for the first time during the first 55 days.

Its structure is composed of a viral capsid made of 2-3 proteins known as VP1-3 which forms an icosahedral structure. This specific structure makes the virus resistant to pH, solvents and temperature as high as 50 °C. There is a single stranded DNA genome inside the capsid with 120-250 nucleotides that are essential for viral genome replication. PPV causes a reproductive disease in pigs called SMEDI which stands for stillbirth, mummification, embryonic death and infertility. The disease is mostly spread by ingestion of contaminated food and water, infected feces and sometimes sexual contact and contact with aborted tissue.

ADI's Porcine Parvovirus (PPV) ELISA Test kit is a highly sensitive indirect type assay for the measurement of PPV in swine serum.

Source of Antigen and Antibodies

Antigen	Full length recombinant Parvovirus-VP2 (Accession# AAV92685.1)
Ab Host/clonality	Rabbit, polyclonal, Unpurified antiserum
Recommended secondary antibody	Goat anti-Rabbit IgG-HRP **(ADI cat#20320)**
Negative control	Non-immune Rabbit IgG **(ADI cat# 20009-1).**



Recombinant Porcine Parvovirus VP2 protein was expressed in *E.coli* as a his-tag fusion protein **PPVVP21-C** is supplied in Laemmli buffer (62.5 mM Tris-HCL pH 8, 2% SDS, 10% glycerol, 5% 2-mercaptoethanol, and 0.002% bromophenol blue at a concentration of 10 ng/ul. Heat for 5 minutes at 95ºC then load 1 to 5 ul in a well. Store at -20ºC in suitable size aliquots.

Form & storage of antibodies

- **Solution**- contains 0.05% sodium azide
- **Lyophilized powder-** reconstitute in 100 ul distilled water

Storage

Short-term: 1 month at 4ºC
Long-term: 12 months at –20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw or store working, diluted solutions.

Shipping: 4ºC for solutions and room temperature for lyophilized powder

Recommended Usage

Quality control: The titer was tested in an Indirect ELISA by coating 1 ug/ml of the recombinant protein, the OD_{450} was ~1.0 at a dilution of 1:10,000.

ELISA: Assay dependent concentration

Western Blot: 1:1,000-1:5,000

*Above dilutions are a suggestion, user must optimize conditions for their own assays.

Specificity & Cross-reactivity

The protein used as an antigen exhibits >95% homology with various isolates of VP2 and VP1.

**This product is for In vitro research use only.*

Related material available from ADI

Catalog#	Description
PPVNS11-C	Recombinant (E.coli) Swine/Porcine Parvovirus (PPV) NS1 protein control for western blot
PPVNS11-R-10	Recombinant (E.coli) Swine/Porcine Parvovirus (PPV) NS1 protein
PPVNS11-S	Rabbit Anti-Swine/Porcine Parvovirus (PPV) NS1 IgG antiserum
PPVVP21-S-antiserum	110618IA

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