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# Certificate of Analysis

## PORCINE CIRCOVIRUS Type 1 and 2 (PCV1&2)

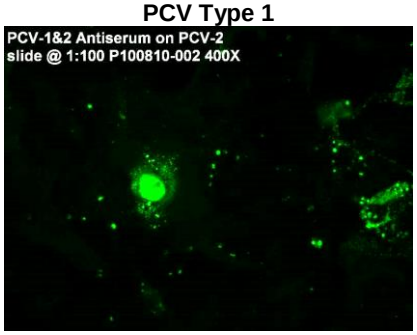
Antiserum

**CATALOG NO.:** PAB-PCV1&2
**VOLUME:** 1 ml
**LOT:** P100810-002
**EXPIRATION:** 10 April 2016

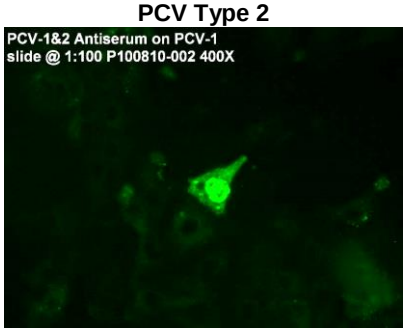
**AGENT:** Porcine Circovirus Type 1 and 2 (PCV1&2)

**DESCRIPTION:** PCV1&2 polyclonal antiserum. Liquid. Porcine origin.

**PCV Type 1**




**PCV Type 2**




**QUALITY CONTROL METHOD:** IFA using VMRD, Inc. PCV-1 12-well slide (catalog no. SLD-IFA-PCV1), PCV-2 12-well slide (catalog no. SLD-IFA-PCV2) and Anti-Porcine IgG conjugate (catalog no. CJ-F-PORG-AP-1ML or 10ML).

**Specific Reaction:** 3-4+ fluorescence with no background at 1/100 on PCV-1 and PCV-2. For both PCV-1 and PCV-2 the endpoint titer is 1/1600.

**Other Comments:** The Antiserum has also been screened by indirect FA and has been found to react with porcine adenovirus (PAV) 3-4+ at 1/50 with an endpoint of 1/3200, porcine hemagglutinating encephalomyelitis virus (PHEV) 2-3+ at 1/50 with an endpoint of 1/400, porcine parvovirus (PPV) 3-4+ @ 1/50 with an endpoint of 1/800, reovirus (REO) 2-3+ with trace background at 1/50 with an endpoint of 1/400, bluetongue virus (BTV) 3-4+ @ 1/100 with an endpoint of 1/25,600, but does not react porcine reproductive and respiratory syndrome virus (PRRSV), transmissible gastroenteritis virus (TGEV), and vesicular stomatitis virus (VSV).

**PATTERN OF FLUORESCENCE:** Particulate cytoplasmic and dense nuclear fluorescence.

**INTENDED USE:** Useful for IFA. Not suitable for cell culture serum neutralization because it contains 0.09% sodium azide as a preservative.

**STORAGE:** This antiserum is provided in liquid form and should be stored at 2-7°C. DO NOT FREEZE! If antiserum becomes cloudy, it should be discarded. This antiserum contains 0.09% sodium azide as a preservative.

**REFERENCES:** NA

FOR *IN VITRO* LABORATORY USE ONLY.

***RECOMMENDED STAINING PROCEDURE FOR INDIRECT FA:***

1. Warm slide to room temperature before removing from foil pouch.
2. Place 50 µl diluted serum on the designated wells. Dilute serum in serum diluting buffer, pH 7.2 (catalog no. FASDB-100ML) however if high background due to anti-bovine IgG activity is present it may be advisable to use SSDB-100ML.
3. Incubate slide in humid chamber at 37°C for 30 minutes.
4. Using a wash bottle, gently rinse slide briefly in FA rinse buffer, pH 9.0 (catalog no. FARB-4X) and then soak for 10 minutes in FA rinse buffer, pH 9.0.
5. Drain slide and dry around wells by pressing blotter (included in pouch) to front surface. Place 50 µl labeled anti-IgG or IgM on the wells.
6. Incubate as in step 3.
7. Rinse as in step 4.
8. Drain slide and dry back and edges with a paper towel. Do not allow stained surface to dry. Do not rinse with water.
9. Mount with mounting fluid [glycerol/FA rinse buffer, pH 9.0, (50/50)] (catalog no. FAMF-10ML) and view with good quality fluorescence microscope at 100X-250X. Confirmation may be made at 400X.

***RECOMMENDED STAINING PROCEDURE FOR DIRECT FA:***

1. Warm slide to room temperature before removing from foil pouch.
2. Place 50 µl of direct FA conjugate on the designated wells.
3. Incubate slide in humid chamber at 37°C for 30 minutes.
4. Using a wash bottle, gently rinse slide briefly in FA rinse buffer, pH 9.0 (catalog no. FARB-4X) and then soak for 10 minutes in FA rinse buffer, pH 9.0.
5. Drain slide and dry back and edges with a paper towel. Do not allow stained surface to dry. Do not rinse with water.
6. Mount with mounting fluid [glycerol/FA rinse buffer, pH 9.0, (50/50)] (catalog no. FAMF-10ML) and view with good quality fluorescence microscope at 100X-250X. Confirmation may be at 400X.

***SERUM DILUTING BUFFER (pH 7.2):****

- $Na_2HPO_4$ . . . . . 1.19 gm
- $NaH_2PO_4$ . . . . . 0.22 gm
- NaCl . . . . . 8.55 gm
- BSA . . . . . 10.0 gm
- DI/$dH_2O$ . . . . . Q.S. to 1 liter

* This recipe makes 1 liter. If you need less, adjust recipe accordingly. Store at 2-7°C. Add 0.09% $NaN_3$ if diluted serum is not going to be used within one week.

***4X FA RINSE BUFFER (pH 9.0):***

- $Na_2CO_3$ . . . . . 11.4 gm
- $NaHCO_3$ . . . . . 33.6 gm
- NaCl . . . . . 8.5 gm
- DI/$dH_2O$ . . . . . .Q.S. to 1 liter

Final pH should be 9.0-9.5. This is a 4X concentrate and should be diluted 1/4 with DI/distilled water for use as a working buffer. Keep in a tightly stoppered container at room temperature. MOUNTING FLUID is made by mixing glycerol and FA rinse buffer, pH 9.0, in equal proportions.