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## Certificate of Analysis

### CANINE PARAINFLUENZA VIRUS Type 2 (CPI-2)

*Anti-Viral Antiserum*

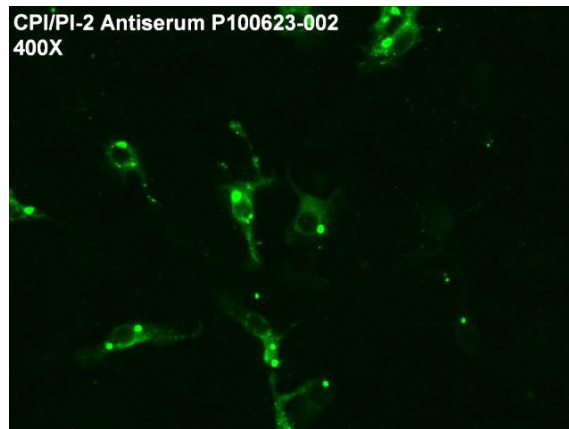
**CATALOG NO.:** PAB-CPI

**VOLUME:** 2 ml

**LOT:** P100623-002

**EXPIRATION:** 06 March 2016

**AGENT:** Canine Parainfluenza Virus Type 2(CPI-2)



**DESCRIPTION:** CPI polyclonal antiserum. Liquid. Porcine origin.

**QUALITY CONTROL METHOD:** Indirect FA using VMRD CPI-2 12-well slide (catalog no. SLD-IFA-CPI), and anti-porcine IgG FITC affinity purified conjugate (catalog no. CJ-F-PORG-AP-10ML).

**Specific Reaction:** 3-4+ fluorescence at 1/400 with no background and an endpoint greater than 1/6,400.

**Other Comments:** The antiserum has also been screened by Indirect FA and has been found to react with canine adenovirus type 1 & 2 (CAV-1&2) with an endpoint of 1/200 but does not react with canine coronavirus (CCV), canine distemper virus (CDV), canine herpesvirus type 1 (CHV-1), or canine parvovirus (CPV).

**PATTERN OF FLUORESCENCE:** Rough, fibrous and speckled cytoplasmic and undifferentiated nuclear fluorescence in syncytia and single cells.

**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.

**WARRANTY:** VMRD, Inc. warrants that this product is as described in the quantity and contents stated on the label at the time of delivery to the customer. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE MADE BEYOND THE LABEL DESCRIPTION, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Remedy is limited to replacement of the product or refund of the purchase price. VMRD, Inc. is not liable for property damage, personal injury, or economic loss caused by the product. The information listed in this information sheet is provided for reference only, and should not be substituted for the user's own incoming material quality control.

**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<sub>2</sub>HPO<sub>4</sub> ..... 1.19 gm
- NaH<sub>2</sub>PO<sub>4</sub> ..... 0.22 gm
- NaCl ..... 8.55 gm
- BSA ..... 10.0 gm
- DI/dH<sub>2</sub>O ..... 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<sub>3</sub> if diluted serum is not going to be used within one week.

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

- Na<sub>2</sub>CO<sub>3</sub> ..... 11.4 gm
- NaHCO<sub>3</sub> ..... 33.6 gm
- NaCl ..... 8.5 gm
- DI/dH<sub>2</sub>O ..... 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.