

 Telephone:
 509-334-5815

 Fax:
 509-332-5356

 E-mail:
 vmrd@vmrd.com

 Web site:
 http://www.vmrd.com

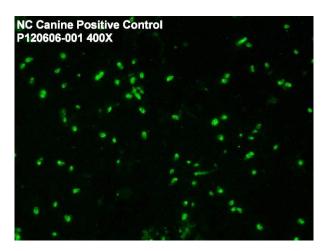
Certificate of Analysis

Neospora caninum (Canine)

IFA Positive Control Serum

CATALOG NO.: PC-IFA-NC-CAN VOLUME: 1 ml LOT: P120606-001 EXPIRATION: 29 June 2016

AGENT: Neospora caninum



DESCRIPTION: Canine serum diluted in PBS, 1% BSA, 0.09% sodium azide.

QUALITY CONTROL METHOD: IFA using VMRD, Inc. *Neospora caninum* 12-well slide (catalog no. SLD-IFA-NC), NC Canine Negative Control (catalog no. NC-IFA-NC-CAN), and Anti-Canine FITC conjugate (catalog no. CJ-F-CANG-10ML).

Specific Reaction: 4+ fluorescence at neat, no background and an endpoint titer of 1+ at 1/8.
 Other Comments: When using *Neospora caninum* systems it is recommended to

er Comments: When using *Neospora caninum* systems it is recommended to use FA Serum Diluting Buffer with 1% BSA pH 7.2 (catalog no. FASDB-100ML) as a diluent.

PATTERN OF FLUORESCENCE: Organisms with bright diffuse or peripheral fluorescence.

INTENDED USE: As a positive control serum in detection of antibody to *Neospora caninum* by indirect FA technique. This serum should be used undiluted to demonstrate positive fluorescence.

STORAGE: Store at 2-7°C. DO NOT FREEZE! If control becomes cloudy it should be discarded.

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.

H:\Quality VMRD\QC\CofA\Positive Controls\Neospora caninum\N. caninum - Canine\PC-IFA-NC-CAN P120606-001 160629.docx 18 July 2012

RECOMMENDED STAINING PROCEDURE FOR INDIRECT FA:

- 1. Warm slide to room temperature before removing from foil pouch.
- 2. Place 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 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 <u>back and edges</u> 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 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 <u>back and edges</u> 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 ₂ HPO ₄ 1.19 gm	
-	NaH ₂ PO ₄ 0.22 gm	
	NaCl	
-	BSA	
-	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% NaN₃ if diluted serum is not going to be used within one week.

4X FA RINSE BUFFER (pH 9.0):

- Na ₂ CO ₃	11.4 gm
- NaHCO ₃	
- NaCl	8.5 gm
- DI/dH ₂ 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.