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## Certificate of Analysis

### **BOVINE VIRAL DIARRHEA VIRUS (BVDV) FITC Conjugate**

**CATALOG NO.:** CJ-F-BVD-10ML

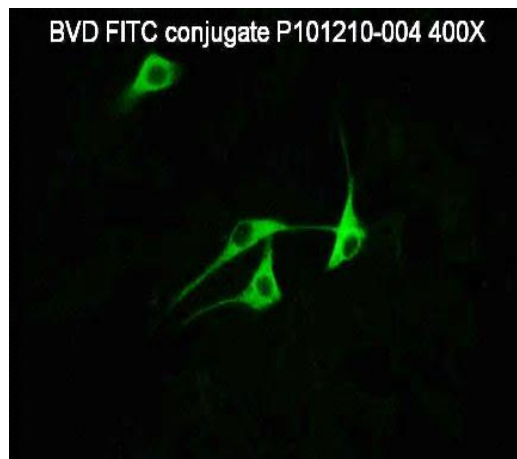
**VOLUME:** 10 ml

**LOT:** P101210-004

**EXPIRATION:** 13 January 2013

**AGENT:** Bovine Viral Diarrhea Virus (BVDV)  
Genotypes I and II

**STRAIN:** NA



**DESCRIPTION:** Anti- BVDV polyclonal antiserum conjugated to fluorescein isothiocyanate (FITC). Porcine origin. Ready to use. Liquid.

**QUALITY CONTROL METHOD:** Direct FA using VMRD, Inc. BVDV 2 well slide (catalog no. SLD-FAC-BVD).

**Specific Reaction:** 3-4+ fluorescence with no background.

**Other Comments:** The raw material has also been screened by Direct FA and was found to react with porcine circovirus type 2 (PCV-2) at 2-4+ but does not react with *Babesia bovis*, bovine adenovirus type 1, 3, and 5 (BAV 1, 3, and 5), bovine coronavirus (BCV), bovine leukemia virus (BLV), bovine parvovirus (BPV), bovine respiratory syncytial virus (BRSV), bluetongue virus (BTV), infectious bovine rhinotracheitis (IBR/BHV-1), *Neospora caninum* (bovine origin), bovine parainfluenzavirus type 3 (PI-3), bovine reovirus (REO), porcine adenovirus (PAV), porcine circovirus type 1 (PCV-1), porcine parvovirus (PPV), transmissible gastroenteritis virus (TGEV), vesicular stomatitis virus Indiana and New Jersey strains (VSV).

**PATTERN OF FLUORESCENCE:** Individual cells with smooth, undifferentiated and/or "ground glass" cytoplasmic fluorescence.

**INTENDED USE:** This reagent is suitable for titration and/or detection of most field strains of BVDV including cytopathic and non-cytopathic and genotypes I and II in cell cultures, buffy smears and tissue sections.

**STORAGE:** This conjugate is provided in liquid form and should be stored at 2-7°C. DO NOT FREEZE! It should also be stored in the original container and/or in the dark (even after dilution). If conjugate becomes cloudy it should be discarded. This conjugate 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 DIRECT FA:**

1. Air dry smears or tissue sections for at least 30 minutes at room temperature (do not dry cell cultures!).
2. Fix smears or tissue sections on slides for 20 minutes in acetone-methanol (75/25) at room temperature. Cell cultures should be rinsed with PBS and fixed in pure acetone for 10 minutes at room temperature. After fixation and before staining, slides should be dried for 10 minutes in a dry 37°C incubator.
3. Stain slides with conjugate for 30 minutes at 37°C in humid chamber.
4. Gently rinse slides briefly in FA Rinse Buffer, pH 9.0 (VMRD catalog no. FARB-4X) and then soak for 10 minutes in FA Rinse Buffer, pH 9.0.
5. Drain slides and dry back and edges with a paper towel. Do not allow stained surface to dry. Do not rinse with water.
6. Mount with FA Mounting Fluid [glycerol/FA rinse buffer, pH 9.0, (50/50)] (VMRD catalog no. FAMF-10ML) and view with good quality fluorescence microscope at 100X-250X. Confirmation may be made at 400X.

**PHOSPHATE BUFFERED SALINE (PBS) SOLUTION (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
- DI/dH<sub>2</sub>O .....Q.S. to 1 liter

**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. FA MOUNTING FLUID is made by mixing glycerol and FA Rinse Buffer, pH 9.0, in equal proportions.