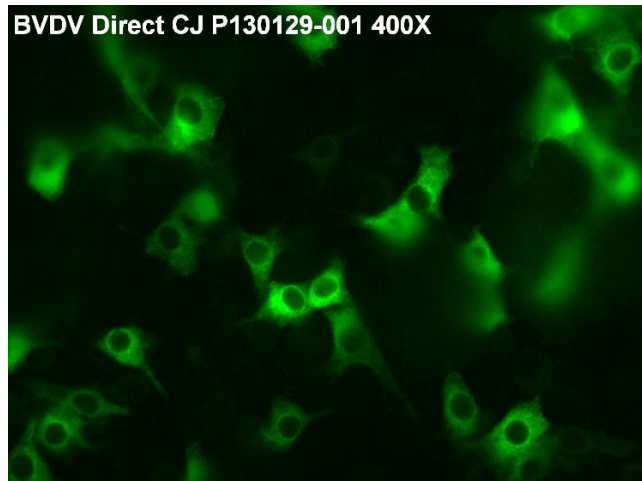


**CERTIFICATE OF ANALYSIS**

# BOVINE VIRAL DIARRHEA VIRUS (BVDV)

Direct FA Conjugate

<b>Catalog No.:</b>	CJ-F-BVD-10ML
<b>Volume:</b>	10 ml
<b>Lot:</b>	P130129-001
<b>Expiration:</b>	07 February 2017
<b>Agent:</b>	Bovine Viral Diarrhea Virus (BVDV) Genotypes I and II
<b>Strain:</b>	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:** 2-4+ fluorescence on the positive well, no background and negative on the negative well, 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*, *Babesia bigemina*, 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), porcine reproductive and respiratory syndrome virus (PRRSV), 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

### 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 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 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.