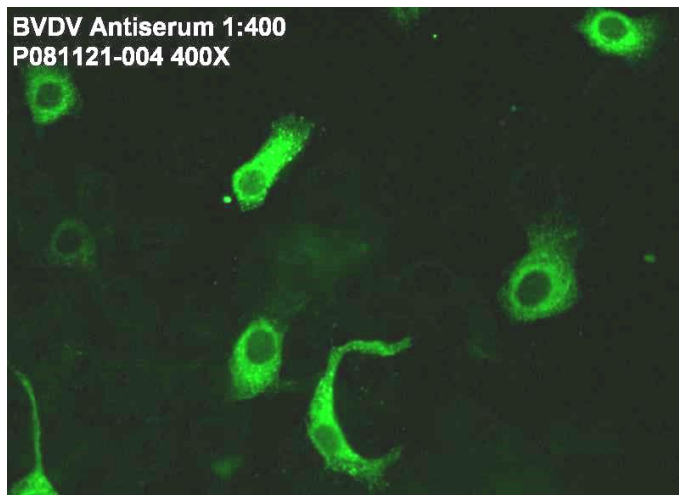


CERTIFICATE OF ANALYSIS

## Bovine Viral Diarrhea Virus (BVDV)

Polyclonal Antiserum

Catalog No.:	PAB-BVD
Volume:	2 ml
Lot:	P081121-004
Expiration:	16 February 2020
Agent:	Bovine Viral Diarrhea Virus (BVDV)



### Description:

BVDV polyclonal antiserum. Liquid. Caprine origin.

### Quality Control Method:

Indirect FA using BVDV 12-well slide (catalog no. SLD-IFA-BVD) and Anti-Caprine IgG FITC Conjugate (catalog no. CJ-F-CAPG-1ML or 0ML).

**Specific Reaction:** 1-4+ signal at 1/400, trace background and an endpoint titer greater than 1/10,000.

**Other Comments:** The Antiserum has also been screened by indirect FA and was found to react with bovine respiratory syncytial virus (BRSV) 2-4+ fluorescence at 1/400 with an endpoint titer of trace to 1+ at 1/6400 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), bluetongue virus (BTV), infectious bovine rhinotracheitis (IBR/BHV-1), *Neospora caninum* (bovine origin), bovine parainfluenzavirus type 3 (PI-3), bovine reovirus (REO), caprine arthritis encephalitis virus (CAEV), and *Toxoplasma gondii*.

### Pattern Of Fluorescence:

Individual cells with smooth, undifferentiated and/or "ground glass" cytoplasmic 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:

- Walz, P.H., *et al.* Experimental model of type II bovine viral diarrhea virus-induced thrombocytopenia in neonatal calves. *J. Vet. Diagn. Invest.* 11:505-514 (1999).
- Harding, M. J., *et al.* Role of bovine viral diarrhea virus biotype in the establishment of fetal infections. *AJVR* 63(10):1455-1463, October 2002.

### 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 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.