

### **CERTIFICATE OF ANALYSIS**

# BA-2

### Monoclonal Antibody

Catalog No.:	BA-2
Lot:	P130906-002
Isotype:	IgG <sub>2a</sub>
Expiration:	1 year when stored at 2-7°C

## Specificity:

Bovine Viral Diarrhea Virus Type 2 (BVDV-2) MAb Ascites E2 gp53  $IgG_{2a}$  Isotype. Note: Reacts primarily with BVDV-2 viruses, but may also react weakly with some BVDV-1 strains (1).



### **Known Applications:**

Can be used in indirect immunofluoresence or indirect immunoperoxidase reactions. This monoclonal antibody has been reported to be reactive in Western blots.

### Description:

This monoclonal antibody is produced as mouse ascites fluid, clarified by centrifugation, and filtered through a  $0.2 \,\mu m$  filter. The antibody concentration is  $1.0 \, mg/ml$ , in phosphate-buffered saline (PBS), stabilized with  $4 \, mg/ml$  bovine serum albumin (BSA), and preserved with 0.09% sodium azide (NaN<sub>3</sub>).

#### Quality Control Method:

Indirect FA using BVDV-1 (Modderman) 12-well (in house slide), BVDV-2 (TN131) 12-well (in house slide), isotype control  $IgG_{2a}$ , and anti-murine affinity purified conjugate (catalog no. CJ-F-MURG-AP-1ML or 10ML). Use mouse Immunoglobulins RID kit.

Specific Reaction: 2-4+ fluorescence at 100 μg/ml on the BVDV type 2 slide. The endpoint titer was

trace to 1+ at 0.01 µg/ml. No fluorescence was produced with the Modderman strain

BVDV-1 slide. The isotype control was negative. RID results showed a

concentration of 0.998 mg/ml.

Other Comments: Note: BVDV1 genotypes usually produce only mild diarrhea in immunocompetent

cattle, while BVDV-2 genotypes can produce thrombocytopenia, hemorrhages, and acute fatal disease. The viruses of either genotype may exist as one of two biotypes,

cytopathic or noncytopathic.

# Pattern Of Fluorescence:

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

#### Storage:

This monoclonal antibody is provided in liquid from and should be stored at 2-7°C. DO NOT FREEZE!

#### References:

- 1) Deregt, D., et al. Monoclonal antibodies to the E2 protein of a new genotype (type 2) of bovine viral diarrhea virus define three antigenic domains involved in neutralization. Virus Research 57(2):171-181 (Oct. 1998).
- 2) Deregt, D., and S. Prins. A monoclonal antibody-based immunoperoxidase layer (microisolation) assay for detection of type 1 and type 2 bovine viral diarrhea viruses. *Can. J. Vet. Res.* 62(2):152-155 (Apr. 1998).

FOR IN VITRO LABORATORY USE ONLY.

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