

**CERTIFICATE OF ANALYSIS**

**BA-2**

Monoclonal Antibody

Catalog No.:	BA-2
Lot:	P130529-001
Isotype:	IgG <sub>2a</sub>

**Specificity:**

Binds to the E2 (gp53) protein of Bovine Viral Diarrhea Virus type 2 (BVDV-2). Reacts primarily with BVDV-2 viruses

**Known Applications:**

Can be used as a typing reagent for BVDV-2 using indirect immunofluorescence 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 µm 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<sub>2a</sub> and Anti-Murine AP 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. The isotype control was negative. RID results showed a concentration of 1.6 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.

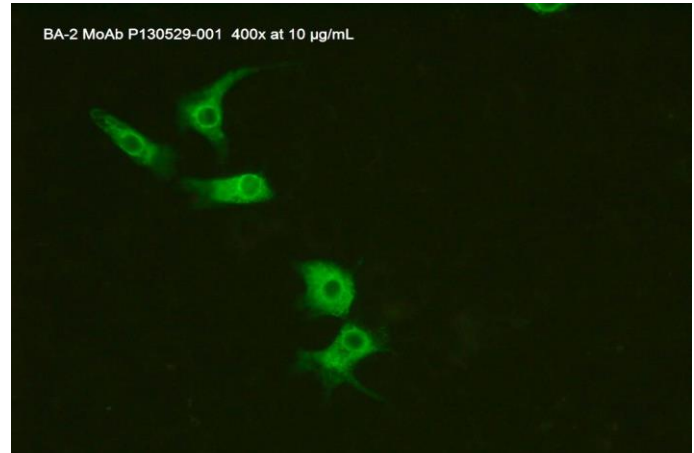
**Storage:**

When the vial is stored at 2-7°C, it should be stable for one year.

**References:**

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).

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).



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