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## Certificate of Analysis

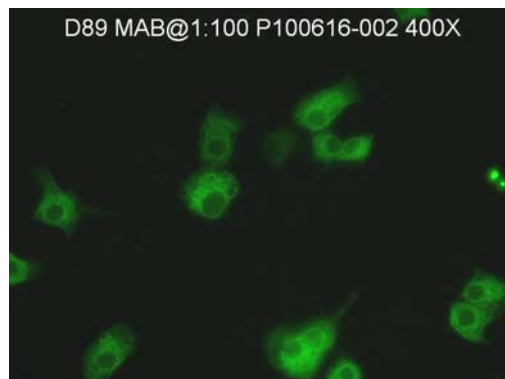
### D89

#### Monoclonal Antibody

CATALOG NO.: D89

LOT: P100616-002

ISOTYPE: IgG<sub>2a</sub>



**KNOWN APPLICATIONS:** Immunofluorescence, immunohistochemistry, virus neutralization.<sup>1</sup>

**SPECIFICITY:** Bovine Viral Diarrhea Virus 55 kDa glycoprotein. Made using NADL strain. Binds to most BVDV strains. Does not bind to Oregon C24V strain.<sup>2</sup>

**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, stabilized with 4 mg/ml bovine serum albumin (BSA) and preserved with 0.09% sodium azide.

**QUALITY CONTROL METHOD:** Indirect FA using BVDV-1 (Modderman) slide (In House), Isotype Control IgG<sub>2a</sub>, and Anti-Mouse conjugate (catalog no. CJ-F-MURG-AP-1ML or CJ-F-MURG-AP-10ML). Note that MoAb D89 also reacts with type 2 but it is not necessary to run the Type 2 (TN131) (John Black) slide.

**Specific Reaction:** 3-4+ fluorescence at 1:100 with no background and the isotype control was negative. The endpoint titer is greater than 1:100,000.

**Other Comments:** NA

**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:

<sup>1</sup>Magar R, Minocha HC, Montpetit C, et al. Typing of cytopathic and noncytopathic bovine viral diarrhea virus reference and Canadian field strains using a neutralizing monoclonal antibody.

FOR *IN VITRO* LABORATORY USE ONLY.

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*Can J Vet Res* 1988;52.(1): 42-45.

<sup>2</sup>Vickers ML, Minocha HC. Diagnosis of bovine viral diarrhea virus infection using monoclonal antibodies. *J Vet Diag Invest* 1990; 2(4):300-302.

<sup>3</sup>Minocha HC, Xue W, Reddy JR. A 50 kDa membrane protein from bovine kidney cells is a putative receptor for bovine viral diarrhea virus (BVDV). *Adv Exp Med Biol* 1997;412:145-158.

<sup>4</sup>Xue W, Zhang S, Minocha HC. Characterization of a putative receptor protein for bovine viral diarrhea virus. *Vet Microbiol* 1997;57(2-3):105-118.

<sup>5</sup>Zheng L, Shang S, Xue W, et al. Expression of a 50 kDa putative receptor for bovine viral diarrhea virus in bovine fetal tissues. *Can J Vet Res* 1998;62(2):156-159.