



## BDV (VPM22): sc-101591

### BACKGROUND

Pestiviruses are enveloped single-chain ribonucleic acid viruses with a positive polarity. Border disease virus (BDV) is a pestivirus which causes widespread congenital disease in sheep. It is closely related to classical swine fever virus and bovine virus diarrhea virus (BVDV). BDV consists of two types, cytopathic (CP) and non-cytopathic (NCP), which produce different pathologies in pregnant sheep. Infection by a non-cytopathic form of BDV during the first half of gestation produces four distinct disease syndromes: 1. early embryonic death, 2. abortion and stillbirth, 3. birth of lambs with malformations, and 4. birth of small, weak lambs. Characteristic lesions may also be found in surviving sheep in the nervous, endocrine, skeletal, integumentary and immune systems.

### REFERENCES

1. Dutia, B.M., Entrican, G. and Nettleton, P.F. 1990. Cytopathic and non-cytopathic biotypes of border disease virus induce polypeptides of different molecular weight with common antigenic determinants. *J. Gen. Virol.* 71: 1227-1232.
2. Sawyer, M.M., Schore, C.E. and Osburn, B.I. 1991. Border disease of sheep—aspects for diagnostic and epidemiologic consideration. *Arch. Virol. Suppl.* 3: 97-100.
3. Sawyer, M.M. 1992. Border disease of sheep: the disease in the newborn, adolescent and adult. *Comp. Immunol. Microbiol. Infect. Dis.* 15: 171-177.
4. Pastoret, P.P., Boulanger, D., Mignon, B. and Waxweiler, S. 1992. Asymptomatic carriage of pestivirus in ruminants. *Rev. Sci. Tech.* 11: 1087-1096.
5. Nettleton, P.F. and Entrican, G. 1995. Ruminant pestiviruses. *Br. Vet. J.* 151: 615-642.
6. Nettleton, P.F., Gilray, J.A., Russo, P. and Dliissi, E. 1998. Border disease of sheep and goats. *Vet. Res.* 29: 327-340.

### SOURCE

BDV (VPM22) is a mouse monoclonal antibody raised against a lysate of ovine cells infected with the cytopathic isolate of BDV.

### PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BDV (VPM22) is available conjugated to agarose (sc-101591 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-101591 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-101591 PE), fluorescein (sc-101591 FITC), Alexa Fluor® 488 (sc-101591 AF488), Alexa Fluor® 546 (sc-101591 AF546), Alexa Fluor® 594 (sc-101591 AF594) or Alexa Fluor® 647 (sc-101591 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-101591 AF680) or Alexa Fluor® 790 (sc-101591 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### APPLICATIONS

BDV (VPM22) is recommended for detection of the p125/p80 non-structural region of Border Disease Virus by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of BDV: 80/130/120 kDa.

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

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