



MDV (5C2): sc-73375

BACKGROUND

Marek's disease (MD) is a highly contagious and often lethal viral neoplastic disease that is common among birds and is characterized by T cell lymphoma, nerve enlargement and the presence of malignant nodules on internal organs. MD is caused by Marek's disease virus (MDV, also known as gallid herpesvirus 2) which belongs to the avian herpesvirus family. Initial infection by MDV occurs in the respiratory tract and causes early cytolytic infection in B cells and latent infection in CD4⁺ T cells, which ultimately leads to the formation of lymphomas in tissues throughout the body. Although MD is extremely contagious, it is not transmitted vertically (to the embryo) and young birds usually develop an immunity by the time they are 5 months old. Vaccination can prevent the formation of tumors in chickens that are infected with MDV, but vaccines do not prevent transmission of the virus.

REFERENCES

1. Witter, R.L., Calnek, B.W., Buscaglia, C., Gimeno, I.M. and Schat, K.A. 2005. Classification of Marek's disease viruses according to pathotype: philosophy and methodology. *Avian Pathol.* 34: 75-90.
2. Jarosinski, K.W., Tischer, B.K., Trapp, S. and Osterrieder, N. 2006. Marek's disease virus: lytic replication, oncogenesis and control. *Expert Rev. Vaccines* 5: 761-772.
3. Burnside, J., Bernberg, E., Anderson, A., Lu, C., Meyers, B.C., Green, P.J., Jain, N., Isaacs, G. and Morgan, R.W. 2006. Marek's disease virus encodes MicroRNAs that map to meq and the latency-associated transcript. *J. Virol.* 80: 8778-8786.
4. Burnside, J. and Morgan, R.W. 2007. Genomics and Marek's disease virus. *Cytogenet. Genome Res.* 117: 376-387.
5. Hughes, A.L. and Rivallier, P. 2007. Phylogeny and recombination history of gallid herpesvirus 2 (Marek's disease virus) genomes. *Virus Res.* 130: 28-33.
6. Lee, L.F., Lupiani, B., Silva, R.F., Kung, H.J. and Reddy, S.M. 2008. Recombinant Marek's disease virus (MDV) lacking the Meq oncogene confers protection against challenge with a very virulent plus strain of MDV. *Vaccine* 26: 1887-1892.
7. Gimeno, I.M. 2008. Marek's disease vaccines: a solution for today but a worry for tomorrow? *Vaccine* 26 Suppl. 3: C31-C41.
8. Chen, M., Payne, W.S., Hunt, H., Zhang, H., Holmen, S.L. and Dodgson, J.B. 2008. Inhibition of Marek's disease virus replication by retroviral vector-based RNA interference. *Virology* 377: 265-272.
9. Heidari, M., Huebner, M., Kireev, D. and Silva, R.F. 2008. Transcriptional profiling of Marek's disease virus genes during cytolytic and latent infection. *Virus Genes* 36: 383-392.

SOURCE

MDV (5C2) is a mouse monoclonal antibody raised against strains SB-1 and Rispens of MDV.

PRODUCT

Each vial contains 100 µg IgM in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MDV (5C2) is recommended for detection of MDV serotype 2 by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.