# CDV (DV6-8B): sc-66014



#### **BACKGROUND**

Canine distemper is a highly infectious and often lethal viral disease of the genus *Morbillivirus* which affects the respiratory, gastrointestinal and central nervous systems of dogs and other carnivores. Dogs from four months to four years old are particularly susceptible. Canine distemper virus (CDV) is transmitted through the air and through contact with infected bodily fluids, including food and water contaminated with these fluids. Once it invades the central nervous system, CDV replicates in glial cells and neurons of the white matter during a period of viral induced immunosuppression, eventually leading to demyelination in the absence of inflammation. Encephalomyelitis is the common cause of death from CDV infection. Persistence of the virus in the brain may be due to non-cytolytic selective spread of CDV with very limited budding.

# **REFERENCES**

- 1. Krakowka, S., Higgins, R.J. and Koestner, A. 1980. Canine distemper virus: review of structural and functional modulations in lymphoid tissues. Am. J. Vet. Res. 41: 284-292.
- Vandevelde, M., Higgins, R.J., Kristensen, B., Kristensen, F., Steck, A.J. and Kihm, U. 1982. Demyelination in experimental canine distemper virus infection: immunological, pathologic and immunohistological studies. Acta Neuropathol. 56: 285-293.
- 3. Osterhaus, A.D., Groen, J., De Vries, P., UytdeHaag, F.G., Klingeborn, B. and Zarnke, R. 1988. Canine distemper virus in seals. Nature 335: 403-404.
- 4. Shin, Y., Mori, T., Okita, M., Gemma, T., Kai, C. and Mikami, T. 1995. Detection of canine distemper virus nucleocapsid protein gene in canine peripheral blood mononuclear cells by RT-PCR. J. Vet. Med. Sci. 57: 439-445.
- Summers, B.A. and Appel, M.J. 1995. Aspects of canine distemper virus and measles virus encephalomyelitis. Neuropathol. Appl. Neurobiol. 20: 525-534.
- Vandevelde, M. and Zurbriggen, A. 1996. The neurobiology of canine distemper virus infection. Vet. Microbiol. 44: 271-280.
- 7. Harder, T.C. and Osterhaus, A.D. 1997. Canine distemper virus—a morbillivirus in search of new hosts? Trends Microbiol. 5: 120-124.
- Cherpillod, P., Tipold, A., Griot-Wenk, M., Cardozo, C., Schmid, I., Fatzer, R., Schobesberger, M., Zurbriggen, R., Bruckner, L., Roch, F., Vandevelde, M., Wittek, R. and Zurbriggen, A. 2000. DNA vaccine encoding nucleocapsid and surface proteins of wild type canine distemper virus protects its natural host against distemper. Vaccine 18: 2927-2936.

## **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 for detailed protocols and support products.

#### **SOURCE**

CDV (DV6-8B) is a mouse monoclonal antibody raised against CDV.

#### **PRODUCT**

Each vial contains 200  $\mu g \; lg G_1$  in 1.0 mL PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

CDV (DV6-8B) is recommended for detection of envelope antigen of CDV origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

## **RESEARCH USE**

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com