

### RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

# MOUSE ANTI CANINE DISTEMPER VIRUS

With HRP-conjugated secondary antibody

Catalog No.	Species:	Isotype:
DS-MB-00193	Virus	Mouse IgG2a

### Description

Canine distemper is a highly infectious and often lethal viral disease of the genus Morbillivirus affecting 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.

## **Applications**

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	•			1:20-1:200
Western Blotting			•	
Immunohistology - frozen			•	
Immunohistology - paraffin			•	
Immunohistology - resin			•	
Immunoprecipitation			•	
Flow Cytometry			•	
Immunofluorence staining			•	
Neutralization			•	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.



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### Preparation

Immunogen was envelope antigen of Canine distemper virus. This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with the immunogen. The IgG fraction of tissue culture supernatant was purified by Protein A affinity chromatography.

# Specificity

DS-MB-00192 detects Canine distemper virus (CDV), a negatively stranded RNA morbillivirus. CDV infection induces a systemic, often fatal disease in a broad and expanding host spectrum among the Carnivora. CDV is highly contagious, and transmission occurs predominantly via aerosols, resulting in neuroinvasiveness and severe immunosuppression. Mortality rates during CDV outbreaks can exceed 80%. DS-MB-00192 may be used as a capture antibody in combination with mouse anti canine distemper virus DS-MB-00193 in an ELISA assay.

#### Reconstitution

Supplied as 100 µg of purified antibody. It is reconstituted with 1ml of sterile PBS. Its final concentration is 0.1 mg/ml. **Please avoid freeze-thaw cycles.** 

## Secondary Antibody Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blot)	•			1:5000-1:10000

### Storage

Store at -20°C, if not intended for use within a month. Keep it at 4°C and minimize freezing and thawing when use.

## Reference

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.

Harder, T.C. and Osterhaus, A.D. (1997) Canine distemper virus--a morbillivirus in search of new hosts? Trends Microbiol. 5: 120-124.