ALPHA DIAGNOSTIC INTERNATIONAL

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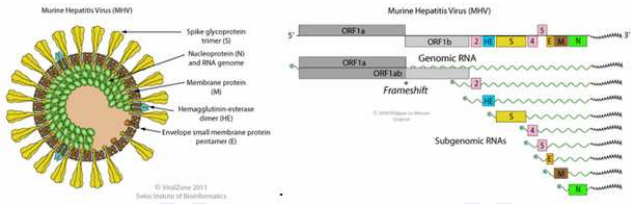
Product Specification Sheet

Rat sialodacryoadenitis Virus (SDAV) nucleoprotein Antibodies and Controls

☐ **Cat #** SDAV11-RNC	Rat Anti-sialodacryoadenitis Virus nucleoprotein (SDAV-NP) **negative** control serum	**SIZE**: 1 ml
☐ **Cat #** SDAV11-RPC	Rat Anti-sialodacryoadenitis Virus nucleoprotein (SDAV-NP) positive control serum	**SIZE**: 1 ml

Animals, just like humans, are susceptible to various bacterial and viral infections. Animals are used widely in biomedical research. Laboratory animal infections may compromise the health of the animals and ultimately the research data derived from them. Microbial infections alter not only the animal behavior but also the biological responses. Apart from the use of whole animals for experimentations, numerous animal cell lines and proteins are also derived from animals and used in biomedical research. Animals or animal-derived products are transported from one part of the world to another in a matter of days. So there is great potential for the diseases to spread very quickly. Many infections are asymptomatic and without any overt clinical symptoms. Detection of microbial infections has relied largely on serological screening and presence of microbial antigens or antibodies.



Sialodacryoadenitis virus (**SDAV**) is distributed worldwide in laboratory rats. SDAV infects the lacrimal and salivary glands and the upper and lower respiratory tracts of rats, causing the clinical manifestations of enlarged salivary glands, sialoadenitis, dacryoadenitis, rhinitis, tracheitis, and bronchoalveolitis. SDAV can also cause reproductive disorders and behavioral changes in the infected animals. Serologic surveys indicate that coronavirus infections are common in laboratory rats housed in research facilities and several outbreaks of SDAV in rat colonies have been reported. Therefore, SDAV is an important viral pathogen in comparative laboratory medicine. SDAV is antigenically related to the mouse hepatitis virus (MHV) serogroup of the family Coronaviridae in the order of Nidovirales. The MHV serogroup includes Parker's rat coronavirus (PRCV), bovine coronavirus (BCV), and human coronavirus (HCV) strain OC43. As with mouse hepatitis coronaviruses (MHVs), the SDAV genome was code for at least three structural proteins associated with the virion: **spike (S) protein, membrane (M) protein, and nucleocapsid (N) protein**. Antibodies specific for MHV structural proteins were able to recognize both SDAV and PRCV proteins on immunoblots.

Source of Antibodies

Pooled Rat serum (Sprague-Dawley, adult, mixed sex) or mouse (Balb/c, adult, mixed sex) containing antibodies to SDAV-NP as tested by ADI ELISA (#AE-310310-1). The positive serum tested positive with A450 values of >2.0. The negative serum produced A450 values of >0.3. Control sera are provide in PBS, pH 7.5 containing 0.1% proclin-300 (preservative) in liquid or lyophilized in the same buffer. Store liquid at 4oC for up to 3 months at 4oC or frozen in suitable size aliquots. Store powder at -20oC in. Reconstitute the powder in 1 ml water.

Recommended as positive and negative controls for anti- SDAV NP protein IgG by ELISA. The controls may or may not be antibody positive against the whole SDAV or other SDAV.

Use undiluted in 50-100 ul per well or dilute as necessary depending upon the sensitivity of the detection.

References: Barker MG (1994) Can J. Vet. Res. 58, 99-103; Yood D (2000) Clin. Diagn. Lab. Immunol.7, 568-573; Bhatt PN (1972) J. Infect. Dis. 126, 123-130; Bhatt PN (1977) Infec. Immun. 18, 823-827; Kunita S (1993) Virol. 193, 520-523.

*This product is for In vitro research use only.

Related material available from ADI

Rabbit Anti-SDAV-NP antibody ELISA kit

Recombinant SDAV-NP protein and antibodies

Mouse, rat, bovine, and other species SDAV antibody ELISA kits

SDAV11-RNC 121121A

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