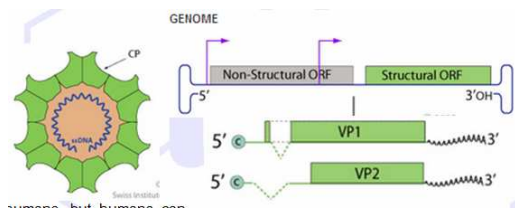


Product Specification Sheet

Minute virus of mice Capsid protein 2 (MVM-VP2) Antibody controls

☐ MVMVP21-MNC	Mouse Anti- Minute virus of mice Capsid protein 2 (MVM-VP2) antibody negative control serum	1 ml
☐ MVMVP21-MPC	Mouse Anti- Minute virus of mice Capsid protein 2 (MVM-VP2) antibody Positive control serum	1 ml
☐ MVMVP22-RNC	Rat Anti- Minute virus of mice Capsid protein 2 (MVM-VP2) antibody negative control serum	1 ml
☐ MVMVP22-RPC	Rat Anti- Minute virus of mice Capsid protein 2 (MVM-VP2) antibody Positive control serum	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. So there is great potential for the diseases to spread very quickly.



Parvoviruses (from Latin parvus meaning small) are typically linear, non-segmented single-stranded DNA viruses, with an average genome size of 5Kb. The viral capsid of a parvovirus is made up of two or three proteins, known as **VP1-3** that form an icosahedral structure that is resistant to acids, bases, solvents and temperature up to 50°C. Structural protein (NS1-2) are conserved and involved in transcription and virus replication. Capsid proteins (VP1-3) exhibit heterogeneity among different parvoviruses. Parvovirus diagnosis is by serology and ELISA. MPV is most pathogenic for haematopoietic cells than **mouse parvoviruses (MPVs)**: **Species: Minute virus of mouse (MVM) or mice minute virus (MMV), Kilham rat virus (KRV), Rat H-1 virus (Toolan's virus), mouse parvovirus (MPV), hamster (HaPV) and rat parvovirus (RPV-1a).** **Natural hosts:** Vertebrates. Minute virus of mice (MVM) and mouse parvovirus (MPV or MPV-1) are among the most prevalent infectious agents detected in contemporary laboratory mouse colonies, with approximately 45 % of USA research institutions harboring these infectious agents and MPV being among the most prevalent viruses detected in research mice. Various clinical disease syndromes in mice have been associated with MVM infection and both MVM and MPV can have deleterious effects on research due to in vitro and in vivo immunomodulatory effects and contamination of cell cultures and tissues originating from mice. As a result, murine parvovirus infections comprise one of the most significant infectious disease problems encountered in contemporary laboratory animal research facilities.

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Source of Antibodies

Pooled Rat serum (Sprague-Dawley, adult, mixed sex) or mouse (Balb/c, adult, mixed sex) containing antibodies to MVM were tested by ADI ELISA (#AE-300900-1 & AE-300910-1). 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-MVM-VP2 IgG by ELISA. The controls may or may not be antibody positive against the whole MVM-VP2 or related viruses.

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

References: Ball-Goodrich LJ (1994) J. Virol. 68, 6476-3486; Brownstein DG (1991) Lab. Invest. 65, 357-364; Astell CR (1986) J. Virol. 57, 656-669; sahl R (1985) Nucl. Acid., red. 13, 3617-3633; Clemens KE (1990) J. Virol. 64, 3967-3973; Cotmore SF (1986) J. Virol. 58, 734-732; Hueffer K (2003) Curr. Opin. Microbiol. 6, 392-398; Kilham L (1970) Proc Soc Exp Biol Med 133, 1447-1452; Labieniec-Pintel, L (1986) J. Virol. 57, 1163-1167; Livingston RS (2003) Clin Diagn Lab Immunol 9, 1025-1031

**This product is for In vitro research use only.*

Related material available from ADI

Catalog# ProdDescription

MVMVP21-MNC	Mouse Anti-Parvovirus (MPV) Capsid Protein 2 (VP2) antibody negative control serum
MVMVP21-MPC	Mouse Anti-Parvovirus (MPV) Capsid Protein 2 (VP2) antibody positive control serum
MVMVP21-R-10	Recombinant (E. coli, his-tag, ~60 Kda) Parvovirus (MPV) Capsid Protein 2 (VP2), full length (>95% pure)
MVMVP22-RNC	Rat Anti-Parvovirus (MPV) Capsid Protein 2 (VP2) antibody negative control serum
MVMVP22-RPC	Rat Anti-Parvovirus (MPV) Capsid Protein 2 (VP2) antibody positive control serum
AE-300900-1	RecombiVirus Mouse Minute Virus (MVM) Antibody ELISA Kit, 96 tests
AE-300910-1	RecombiVirus Rat Minute Virus (MVM) Antibody ELISA Kit, 96 tests

MVMVP21-MNC

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