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AM08450PU-N	Monoclonal Antibody to MHV NSP9 (Strain A59) - Purified
Alternate names:	Mouse Hepatitis Virus Strain A59, Murine coronavirus, Nonstructural Protein 9
Quantity:	0.1 mg
Concentration:	2.1 mg/ml (by UV absorbance at 280 nm)
Background:	The nonstructural protein 9 (nsp9) is one of the Mouse hepatitis virus replicase cleavage products, encoded by ORF1a. Nsp9 is an RNA-binding protein that is thought to be part of the viral replication complex, which is associated with intracellular membranes.
Uniprot ID:	<u>P0C6X9</u>
NCBI:	<u>11142</u>
Host / Isotype:	Mouse / IgG2b
Recommended Isotype Controls:	SM12P, AM03110PU-N
Clone:	2C6.H1
Immunogen:	E. coli derived fulllength MHV-A59 nsp9 protein. Remarks: This protein is part of the viral replicase polyprotein.
Format:	State: Liquid Ig fraction Purification: Protein A chromatography Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 0.01% (w/v) Sodium Azide
Applications:	Western blot: 1:1,000 (Expect a band approximately 13 kDa in size corresponding to mature MHV-A59 nsp9 in the appropriate cell lysate or extract). Immunofluorescence: 1:1,000 (Vero-E6 cells were grown on glass slides followed by infection with MHVA59 strain and fixation with PBS/3%PFA. After washing and permeabilization of the fixed cells, antibody incubation was performed in PBS/5%FCS for 30 min).
	Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody is directed against the MHV-A59 nsp9 protein.
Species Reactivity:	Tested: Mouse.
Storage:	Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C or below for longer. Avoid repeated freezing and thawing. Should this product contain a precipitate we recommend microcentrifugation before use. Shelf life: one year from despatch.
General Readings:	1. Ziebuhr J, Snijder EJ, Gorbalenya AE. Virus-encoded proteinases and proteolytic processing in the Nidovirales. J Gen Virol. 2000 Apr;81(Pt 4):853-79. PubMed PMID: 10725411.

For research and in vitro use only. Not for diagnostic or therapeutic work. Material Safety Datasheets are available at www.acris-antibodies.com or on request.



2. Snijder EJ, Bredenbeek PJ, Dobbe JC, Thiel V, Ziebuhr J, Poon LL, et al. Unique and conserved features of genome and proteome of SARS-coronavirus, an early split-off from the coronavirus group 2 lineage. J Mol Biol. 2003 Aug 29;331(5):991-1004. PubMed PMID: 12927536.

3. Egloff MP, Ferron F, Campanacci V, Longhi S, Rancurel C, Dutartre H, et al. The severe acute respiratory syndrome-coronavirus replicative protein nsp9 is a single-stranded RNA-binding subunit unique in the RNA virus world. Proc Natl Acad Sci U S A. 2004 Mar 16;101(11):3792-6. Epub 2004 Mar 8. PubMed PMID: 15007178.

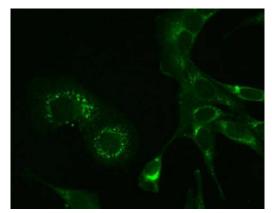
4. Sutton G, Fry E, Carter L, Sainsbury S, Walter T, Nettleship J, et al. The nsp9 replicase protein of SARS-coronavirus, structure and functional insights. Structure. 2004 Feb;12(2):341-53. PubMed PMID: 14962394.

5. Bost AG, Carnahan RH, Lu XT, Denison MR. Four proteins processed from the replicase gene polyprotein of mouse hepatitis virus colocalize in the cell periphery and adjacent to sites of virion assembly. J Virol. 2000 Apr;74(7):3379-87. PubMed PMID: 10708455.

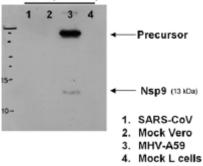
Pictures:

Immunofluorescence microscopy using anti-MHV-A59 nsp9 antibody, 6-h post infection in mouse L cells. Cells were fixed in 3% paraformaldehyde. For detection Cy2 conjugated Goat-anti-Mouse IgG MX10 (610-111-121) was used. Personal Communication, Eric Snijder, Leiden University Medical Center, Leiden, Netherlands.

Western blotting using anti-MHV-A59 nsp9 antibody to detect protein in various lysates, 6h post MHV infection. Lane 1 shows no crossreactivity with SARS-CoV-infected Vero cells. Specific reactivity against MHV-A59 nsp9 from infected mouse L cells is shown in lane 3. Negative controls (lanes 2 and 4) show no staining. Personal Communication, Eric Snijder, Leiden University Medical Center, Leiden, Netherlands.



2C6 (1:1000)



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