

**Certificate of Analysis****Product:** Anti-SARS-CoV Membrane (M) Protein (Rabbit)**Code:** 100-401-A55**Lot #:** 17039**Size:** 100 µl**Physical State:** Liquid (sterile filtered))**Protein Concentration:** 85 mg/ml (by Refractometry)**Buffer:** None**Stabilizer:** None**Preservative:** 0.01% (w/v) Sodium Azide

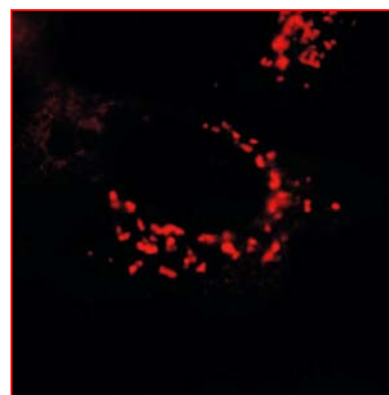
**Storage Conditions:** Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

**Background Information:** The coronavirus membrane protein is a major structural component of the viral envelope and a determinant of virus assembly.

**Recommended Dilutions:**

<b>IMMUNO PRECIPITATION</b>	1:60
<b>WESTERN BLOT</b>	1:1,000
<b>IMMUNO ELECTRON MICROSCOPY</b>	1:200
<b>IF MICROSCOPY</b>	1:1,000
<b>OTHER APPLICATIONS</b>	User Optimized

**Figure.** Immunofluorescence Microscopy using Rockland Immunochemicals anti- SARS-CoV Membrane protein antibody, 6-h post infection Vero-E6 cells. For detection Cy3 conjugated Goat-anti-Rabbit IgG MX (611-104-122) was used. *Personal Communication, Eric Snijder, Leiden University Medical Center, Leiden, Netherlands.*



**Application Note(s):** This antibody has been tested for use in immunofluorescence microscopy, immunoprecipitation, immunoelectron microscopy and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 25 kDa in size corresponding to SARS-CoV membrane protein by western blotting in the appropriate cell lysate or extract. For immunofluorescence microscopy, Vero-E6 cells, grown on glass slides, were infected with SARS-CoV-Fr1 strain for 1 h at 37°C. Infection occurred in PBS/DEAE/2%FCS followed by exchange to EMEM/25mMHEPES/2%FCS. Cells were fixed with PBS/3%PFA. After washing fixed cells, antibody incubation was performed in PBS/5%FCS for 30 min.

**Purity and Specificity:** This antibody is directed against SARS-Coronavirus membrane protein. The product is neat antiserum. Cross reactivity with homologues from other sources has not been determined.

**Relevant Link(s):** NCBI Link (polyprotein) [NP\\_828849](#) NCBI Link (M) [AAP13444](#)

**Immunogen:** This antibody was prepared from whole rabbit serum produced by repeated immunizations with a BSA-coupled synthetic peptide corresponding to the C-terminus (amino acid residues 204-221) of the SARS Coronavirus Membrane protein.

**Protein Sequence: SARS Coronavirus Membrane (M) Protein, 221 aa, predicted MW 25.0 kDa**

1	madngtitve	elkqlleqwn	lvigfclaw	imllqfaysn	mrflyiikl	vflwllwpvt
61	lacfvlaavy	rinwvtggia	iamacivglm	wlsyvasfr	lfartsmws	fnpetnilln
121	vplrgtivtr	plmeselvig	aviirghlrm	aghslgrcdi	kdlpkeitva	tsrtsyykl
181	gasqrvgtds	gfaaynriry	<b>gnyklntdha</b>	<b>gsndniallv</b>	<b>q</b>	

**General References:**

Snijder, E. J., P. J. Bredenbeek, J. C. Dobbe, V. Thiel, J. Ziebuhr, L. L. M. Poon, Y. Guan, M. Rozanov, W. J. M. Spaan, and A. E. Gorbalenya. 2003. Unique and conserved features of genome and proteome of SARS-coronavirus, an early split-off from the coronavirus group 2 lineage. *J. Mol. Bio.* **331**:991-1004.

Snijder, E.J., van der Meer, Y., Zevenhoven-Dobbe, J.C., Onderwater, J.J.M., van der Meulen, J., Koerten, H.K., and Mommaas, A.M. 2006. Ultrastructure and origin of membrane vesicles associated with the SARS-coronavirus replication complex. Manuscript in preparation.

**Related Products:**

#200-401-A50	Protein A Purified Anti-SARS-CoV (N) Protein (Rabbit)	#200-401-A54	Protein A Purified Anti-SARS-CoV nsp13 (Rabbit)
#200-401-A51	Protein A Purified Anti-SARS-CoV 3CL Protease (Rabbit)	#200-401-A55	Protein A Purified Anti-SARS-CoV (M) Protein (Rabbit)
#200-401-A52	Protein A Purified Anti-SARS-CoV nsp3 (Rabbit)	#611-103-122	HRP Anti-RABBIT IgG (H&L) (GOAT) MX10
#200-401-A53	Protein A Purified Anti-SARS-CoV nsp8 (Rabbit)	#611-132-122	IRDye800 Anti-RABBIT IgG (H&L) (GOAT) MX10
#MB-070	Blocking Buffer for Fluorescent Western Blotting	#KIA-003	<b>MaxTag™</b> Anti-RABBIT IgG Kit for Immunoblotting

**USDA Certification:** All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation.

**Note:** This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information.