

# Datasheet: MCA490 BATCH NUMBER 154890

Description:	MOUSE ANTI RESPIRATORY SYNCYTIAL VIRUS FUSION PROTEIN				
Specificity: RESPIRATORY SYNCYTIAL VIRUS FUSION PROTEIN					
Other names:	RSV				
Format:	Purified				
Product Type:	Monoclonal Antibody				
Clone:	RSV3216 (B016)				
Isotype:	lgG2b				
Quantity:	1 mg				

# **Product Details**

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <u>www.bio-rad-antibodies.com/protocols</u>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				
Immunohistology - Frozen			•	
Immunohistology - Paraffin			•	
ELISA (1)				
Immunoprecipitation				
Western Blotting				
Immunofluorescence				
Immuno-electron				
Microscopy	-			
Where this antibody has	not been	tested for	or use in a particular tec	hnique this does not
necessarily exclude its us	se in suc	h proced	ures. It is recommended	that the user titrates
the antibody for use in the	eir own s	vstem us	sing appropriate negativ	e/positive controls.
(1)Suitable as capture r		•	• • • •	•

(1)Suitable as capture reagent with MCA491 as detection reagent in sandwic
ELISA (See <u>Adams <i>et al.</i> 2010</u> for details).

Target Species	Viral
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on protein A from tissue culture supernatant.

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Bovine RSV strains: 127, SNK and 9007. Human RSV strains: Long, Randall, 8/60, and A/2.
RRID	AB_2231368
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	Mouse anti respiratory syncytial virus fusion protein antibody, clone RSV3216 recognises an epitope within the RSV fusion protein (46 kDa and 22 kDa s-s linked glycoprotein).
	Mouse anti respiratory syncytial virus fusion protein antibody, clone RSV3216 can be used in IFA studies in conjunction with <u>MCA491G</u> (clone RSV3132).
Purity	>90% lgG
References	<ol> <li>Mason, S.W. <i>et al.</i> (2004) Polyadenylation-dependent screening assay for respiratory syncytial virus RNA transcriptase activity and identification of an inhibitor. <u>Nucleic Acids Res.</u> 32 (16): 4758-67.</li> <li>Adams, O. <i>et al.</i> (2010) Palivizumab-resistant human respiratory syncytial virus infection in infancy. <u>Clin Infect Dis.</u> 2010 Jul 15;51(2):185-8.</li> <li>Eckardt-Michel, J. <i>et al.</i> (2008) The fusion protein of respiratory syncytial virus triggers p53-dependent apoptosis. <u>J Virol.</u> 82: 3236-49.</li> <li>Kolokoltsov, A.A. <i>et al.</i> (2007) Small interfering RNA profiling reveals key role of clathrin-mediated endocytosis and early endosome formation for infection by respiratory syncytial virus. <u>J Virol.</u> 81: 7786-800.</li> <li>Riffault, S. <i>et al.</i> (2006) Replication of bovine respiratory syncytial virus in murine cells depends on type I interferon-receptor functionality. <u>J Gen Virol.</u> 87: 2145-8.</li> <li>Schlender, J. <i>et al.</i> (2005) Inhibition of toll-like receptor 7- and 9-mediated alpha/beta interferon production in human plasmacytoid dendritic cells by respiratory syncytial virus and measles virus. <u>J Virol. 79 (9): 5507-15.</u></li> <li>Schlender, J. <i>et al.</i> (2005) A chimeric respiratory syncytial virus fusion protein subunit F2, not attachment protein G, determines the specificity of RSV infection. <u>J Virol. 77: 4609-16.</u></li> <li>Zimmer, G. <i>et al.</i> (2003) Virokinin, a bioactive peptide of the tachykinin family, is released from the fusion protein of bovine respiratory syncytial virus. <u>J Virol. 79: 10467-77.</u></li> <li>Zimmer, G. <i>et al.</i> (2003) Virokinin, a bioactive peptide of the tachykinin family, is released from the fusion protein of bovine respiratory syncytial virus. J Biol Chem. 278: 46854-61.</li> <li>Riffault, S. <i>et al.</i> (2010) A new subunit vaccine based on nucleoprotein nanoparticles</li> </ol>

	<ul> <li>confers partial clinical and virological protection in calves against bovine respiratory syncytial virus. <u>Vaccine. 28: 3722-34.</u></li> <li>11. Yunus, A. <i>et al.</i> (2010) Elevated temperature triggers human respiratory syncytial virus F protein six-helix bundle formation. <u>Virology. 396: 226-37.</u></li> <li>12. Zimmer, G. <i>et al.</i> (2002) Cleavage at the furin consensus sequence RAR/KR(109) and presence of the intervening peptide of the respiratory syncytial virus fusion protein are dispensable for virus replication in cell culture. <u>J Virol. 76 (18): 9218-24.</u></li> <li>13. Adams, O. <i>et al.</i> (2013) Genetic analysis and antigenic characterization of human respiratory syncytial virus group A viruses isolated in Germany 1996-2008. <u>Virus Genes.</u> <u>47 (2): 210-8.</u></li> <li>14. Zimmer, G. <i>et al.</i> (2001) Proteolytic activation of respiratory syncytial virus fusion protein. Cleavage at two furin consensus sequences. <u>J Biol Chem. 276 (34): 31642-50.</u></li> <li>15. Zimmer, G. <i>et al.</i> (2001) N-glycans of F protein differentially affect fusion activity of human respiratory syncytial virus. <u>J Virol. 75 (10): 4744-51.</u></li> <li>16. Shaw, C.A. <i>et al.</i> (2013) The role of non-viral antigens in the cotton rat model of respiratory syncytial virus vaccine-enhanced disease. <u>Vaccine. 31 (2): 306-12.</u></li> <li>17. Sandhu, J.S. <i>et al.</i> (2000) Oral immunization of mice with transgenic tomato fruit expressing respiratory syncytial virus-F protein induces a systemic immune response. <u>Transgenic Res. 9 (2): 127-35.</u></li> <li>18. Hägglund S <i>et al.</i> (2014) Characterization of an experimental vaccine for bovine respiratory syncytial virus. <u>Clin Vaccine Immunol. 21 (7): 997-1004.</u></li> <li>19. Hervé, P.L. <i>et al.</i> (2016) RSV N-nanorings fused to palivizumab-targeted neutralizing epitope as a nanoparticle RSV vaccine. <u>Nanomedicine. Aug 20. pii: S1549-9634(16)30114-9. [Epub ahead of print]</u></li> <li>20. Fleming, E.H. <i>et al.</i> (2014) Respiratory syncytial virus F envelope protein associates with lipid rafts without a requirement fo</li></ul>
Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA490 10040
Regulatory	For research purposes only

## **Related Products**

### **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12)		<u>RP</u>	E				
Goat Anti Mouse IgG IgA IgM (STAR87			<u>P</u>				
Goat Anti Mouse IgG (STAR76)		<u>RP</u>	RPE				
Rabbit Anti Mouse IgG (STAR13)		HR	HRP				
Goat Anti Mouse IgG (STAR70)		<u>FIT</u>	<u>FITC</u>				
Goat Anti Mouse IgG (H/L) (STAR117)		<u>Alk. Phos.</u> , <u>DyLight®488</u> , <u>DyLight®550</u> ,					
		DyLight®650, DyLight®680, DyLight®800,					
		<u>FIT</u>	<u>C, HRP</u>				
Rabbit Anti Mouse IgG (STAR9)		<u>FITC</u>					
Goat Anti Mouse IgG (STAR77)		HRP					
Goat Anti Mouse IgG (Fc) (STAR120)		FITC, HRP					
North & South America	Tel: +1 800 265 7376 <b>Worldw</b> Fax: +1 919 878 3751 Email: antibody sales us@bio-rad.com	vide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-ra	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com		
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M368063:200529'

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