

## Datasheet: MCA1360GA

**BATCH NUMBER 148208**

<b>Description:</b>	MOUSE ANTI V5-TAG
<b>Specificity:</b>	V5-TAG
<b>Other names:</b>	PK-TAG
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	SV5-Pk1
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.1 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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			1/1000 - 1/5000
Immunoprecipitation	▪			
Western Blotting	▪			1/1000 - 1/5000
Immunofluorescence	▪			
Radioimmunoassays	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Viral
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

## Stabilisers

---

Carrier Free Yes

---

Approx. Protein Concentrations IgG concentration 1 mg/ml

---

Immunogen Paramyxovirus Simian-Virus 5 (SV5)

---

External Database Links  
**UniProt:**  
[P11207](#)   [Related reagents](#)

---

RRID AB\_567249

---

Fusion Partners Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0 Ag14 myeloma cell line.

---

Specificity **Mouse anti V5-Tag, clone SV5-Pk1** recognizes the sequence, IPNPLLGLD, present on the P/V proteins of the paramyxovirus, SV5 ([Dunn et al.1999](#)). Clone SV5-Pk1 is used to detect recombinant proteins, some of which include transmembrane and secreted proteins, that have labeled with tags containing this sequence ([Randall et al.1993](#) and [Zhao et al. 2005](#)).

---

- References
1. Southern, J.A. *et al.* (1991) Identification of an epitope on the P and V proteins of simian virus 5 that distinguishes between two isolates with different biological characteristics. [J Gen Virol. 72 \( Pt 7\): 1551-7.](#)
  2. Orime, K. *et al.* (2013) Trefoil Factor 2 Promotes Cell Proliferation in Pancreatic  $\beta$ -Cells through CXCR-4-Mediated ERK1/2 Phosphorylation. [Endocrinology. 154: 54-64.](#)
  3. Randall, R.E. *et al.* (1993) Two-tag purification of recombinant proteins for the construction of solid matrix-antibody-antigen (SMAA) complexes as vaccines. [Vaccine. 11 \(12\): 1247-52.](#)
  4. Randall, R.E. *et al.* (1994) Purification of antibody-antigen complexes containing recombinant SIV proteins: comparison of antigen and antibody-antigen complexes for immune priming. [Vaccine. 12 \(4\): 351-8.](#)
  5. Hanke, T. *et al.* (1995) Attachment of an oligopeptide epitope to the C-terminus of recombinant SIV gp160 facilitates the construction of SMAA complexes while preserving CD4 binding. [J Virol Methods. 53 \(1\): 149-56.](#)
  6. Jaffray, E. *et al.* (1995) Domain organization of I kappa B alpha and sites of interaction with NF-kappa B p65. [Mol Cell Biol. 15 \(4\): 2166-72.](#)
  7. Rodriguez, M.S. *et al.* (1995) Inducible degradation of I kappa B alpha in vitro and in vivo requires the acidic C-terminal domain of the protein. [Mol Cell Biol. 15 \(5\): 2413-9.](#)
  8. Chung, J.S. *et al.* (2009) The DC-HIL/syndecan-4 pathway inhibits human allogeneic T-cell responses. [Eur J Immunol. 39: 965-74.](#)
  9. Hirst, K. *et al.* (1994) The transcription factor, the Cdk, its cyclin and their regulator: directing the transcriptional response to a nutritional signal. [EMBO J. 13 \(22\): 5410-20.](#)
  10. Dunn, C. *et al.* (1999) Fine mapping of the binding sites of monoclonal antibodies raised against the Pk tag. [J Immunol Methods. 224 \(1-2\): 141-50.](#)

11. Lou, J.J. *et al.* (2010) Inhibition of hypoxia-inducible factor-1alpha (HIF-1alpha) protein synthesis by DNA damage inducing agents. [PLoS One. 5: e10522.](#)
12. Sanchez Garcia, J. *et al.* (2004) The C-terminal zinc finger of the catalytic subunit of DNA polymerase delta is responsible for direct interaction with the B-subunit. [Nucleic Acids Res. 32 \(10\): 3005-16.](#)
13. Herskowitz, J.H. *et al.* (2011) Rho kinase II phosphorylation of the lipoprotein receptor LR11/SORLA alters amyloid-beta production. [J Biol Chem. 286 \(8\): 6117-27.](#)
14. Liebau, M.C. *et al.* (2011) Nephrocystin-4 regulates Pyk2-induced tyrosine phosphorylation of Nephrocystin-1 to control targeting to monocilia. [J Biol Chem. 286: 14237-45.](#)
15. Björk, J.K. *et al.* (2010) miR-18, a member of Oncomir-1, targets heat shock transcription factor 2 in spermatogenesis. [Development. 137\(19\):3177-84.](#)
16. Boggio, R. *et al.* (2007) Targeting SUMO E1 to ubiquitin ligases: a viral strategy to counteract sumoylation. [J Biol Chem. 282: 15376-82.](#)
17. Gallazzini, M. *et al.* (2011) High NaCl-induced activation of CDK5 increases phosphorylation of the osmoprotective transcription factor TonEBP/OREBP at threonine 135, which contributes to its rapid nuclear localization. [Mol Biol Cell. 22: 703-14.](#)
18. Hadler, K.S. *et al.* (2008) Identification of a non-purple tartrate-resistant acid phosphatase: an evolutionary link to Ser/Thr protein phosphatases? [BMC Res Notes. 1: 78.](#)
19. Zhao, A. *et al.* (2011) Rapid isolation of high-affinity human antibodies against the tumor vascular marker Endosialin/TEM1, using a paired yeast-display/secretory scFv library platform. [J Immunol Methods. 363: 221-32.](#)
20. Patino, G.A. *et al.* (2011) Voltage-Gated Na<sup>+</sup> Channel {beta}1B: A Secreted Cell Adhesion Molecule Involved in Human Epilepsy. [J Neurosci. 31: 14577-91.](#)
21. Gatherer, D. *et al.* (2011) High-resolution human cytomegalovirus transcriptome. [Proc Natl Acad Sci U S A. 108: 19755-60.](#)
22. Mahuzier, A. *et al.* (2012) Dishevelled stabilization by the ciliopathy protein Rpgrip11 is essential for planar cell polarity. [J Cell Biol. 198: 927-40.](#)
23. Zhao, C. *et al.* (2005) Human ISG15 conjugation targets both IFN-induced and constitutively expressed proteins functioning in diverse cellular pathways. [Proc Natl Acad Sci U S A. 102:10200-5](#)
24. Singh, A. *et al.* (2014) Trypanosome MKT1 and the RNA-binding protein ZC3H11: interactions and potential roles in post-transcriptional regulatory networks. [Nucleic Acids Res. 42: 4652-68.](#)
25. Mui, M.Z. *et al.* (2015) The Human Adenovirus Type 5 E4orf4 Protein Targets Two Phosphatase Regulators of the Hippo Signaling Pathway. [J Virol. 89 \(17\): 8855-70.](#)
26. Shi X *et al.* (2016) Bunyamwera orthobunyavirus glycoprotein precursor is processed by cellular signal peptidase and signal peptide peptidase. [Proc Natl Acad Sci U S A. 113 \(31\): 8825-30.](#)
27. Ng, M.Y. *et al.* (2017) Activation of MAPK/ERK signaling by *Burkholderia pseudomallei* cycle inhibiting factor (Cif). [PLoS One. 12 \(2\): e0171464.](#)
28. Voskarides, K. *et al.* (2017) A functional variant in NEPH3 gene confers high risk of renal failure in primary hematuric glomerulopathies. Evidence for predisposition to microalbuminuria in the general population. [PLoS One. 12 \(3\): e0174274.](#)
29. Malik, S. *et al.* (2015) Adrenocorticotrophic Hormone (ACTH) Responses Require Actions of the Melanocortin-2 Receptor Accessory Protein on the Extracellular Surface of

- the Plasma Membrane. [J Biol Chem. 290 \(46\): 27972-85.](#)
30. Carrocci, T.J. *et al.* (2017) SF3b1 mutations associated with myelodysplastic syndromes alter the fidelity of branchsite selection in yeast. [Nucleic Acids Res. 45 \(8\): 4837-4852.](#)
31. Kerwin, S.K. *et al.* (2018) Regulated Alternative Splicing of *Drosophila Dscam2* Is Necessary for Attaining the Appropriate Number of Photoreceptor Synapses. [Genetics. 208 \(2\): 717-728.](#)
32. Játiva, S. *et al.* (2019) Cdc14 activation requires coordinated Cdk1-dependent phosphorylation of Net1 and PP2A-Cdc55 at anaphase onset. [Cell Mol Life Sci. 76 \(18\): 3601-20.](#)
33. Tan, C.Y. & Hagen, T. (2013) mTORC1 dependent regulation of REDD1 protein stability. [PLoS One. 8 \(5\): e63970.](#)
34. Waizenegger, A. *et al.* (2020) Mus81-Mms4 endonuclease is an Esc2-STUbL-Cullin8 mitotic substrate impacting on genome integrity. [Nat Commun. 11 \(1\): 5746.](#)
35. Yahya, G. *et al.* (2020) Phospho-regulation of the Shugoshin - Condensin interaction at the centromere in budding yeast. [PLoS Genet. 16 \(8\): e1008569.](#)
36. Lee, B.G. *et al.* (2020) Cryo-EM structures of holo condensin reveal a subunit flip-flop mechanism. [Nat Struct Mol Biol. 27 \(8\): 743-51.](#)
37. Bajak, K. *et al.* (2020) A potential role for a novel ZC3H5 complex in regulating mRNA translation in *Trypanosoma brucei*. [J Biol Chem. 295 \(42\): 14291-304.](#)
38. Sabath, K. *et al.* (2020) INTS10-INTS13-INTS14 form a functional module of Integrator that binds nucleic acids and the cleavage module. [Nat Commun. 11 \(1\): 3422.](#)
39. Du, Z. *et al.* (2021) Structure-function analysis of oncogenic EGFR Kinase Domain Duplication reveals insights into activation and a potential approach for therapeutic targeting. [Nat Commun. 12 \(1\): 1382.](#)
40. Morafraille, E.C. *et al.* (2020) Exo1 phosphorylation inhibits exonuclease activity and prevents fork collapse in rad53 mutants independently of the 14-3-3 proteins. [Nucleic Acids Res. 48 \(6\): 3053-70.](#)

<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>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.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	This product is manufactured under an exclusive license from the University of St. Andrews, UK.
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1360GA">https://www.bio-rad-antibodies.com/SDS/MCA1360GA</a></p> <p>10040</p>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M365200:200529'

Printed on 25 Mar 2023