

Datasheet: MCA1396G

BATCH NUMBER 171262

Description:	MOUSE ANTI HISTIDINE TAG
Specificity:	HISTIDINE TAG
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AD1.1.10
Isotype:	IgG1
Quantity:	2 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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation	▪			
Western Blotting	▪			1/500 - 1/1000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Synthetic Peptide
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 (NaN ₃)
Carrier Free	Yes

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	PAX6 transcription factor linked to histidine tag.
RRID	AB_1172147
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	Mouse anti Histidine tag antibody, clone AD1.1.10 recognizes proteins and peptides containing the motif H-H-H-H-H-H and is therefore of value in detecting proteins containing histidine tags. Clone AD1.1.10 has been used to detect and purify histidine-tagged proteins expressed in mammalian (Hoffmann <i>et al.</i> 2007) and Hwang <i>et al.</i> 2008) and non-mammalian (Zheng <i>et al.</i> 2007; Gunnarsen <i>et al.</i> 2010; and de Vooght et al. 2012) cell lines. In Western blotting of bacterial extracts the antibody has been shown not to cross-react with any endogenous products, although some cross-reactivity may be seen with extracts of insect or mammalian cells. This antibody is routinely tested in Western blotting on histidine tagged recombinant proteins and reacts against all histidine-tagged proteins so far tested.
References	1. Els Conrath, K. <i>et al.</i> (2001) Camel single-domain antibodies as modular building units in bispecific and bivalent antibody constructs. J Biol Chem. 276 (10): 7346-50. 2. Suen, J.L. <i>et al.</i> (2001) Characterization of self-T-cell response and antigenic determinant of U1A protein with bone marrow-derived dendritic cells in NZB x NZW F₁ mice. Immunol. 103: 301-309. 3. Hoffmann, S.C. <i>et al.</i> (2007) Identification of CLEC12B, an inhibitory receptor on myeloid cells. J Biol Chem. 282 (31): 22370-5. 4. Zheng, J. <i>et al.</i> (2007) Serum from mice immunized in the context of Treg inhibition identifies DEK as a neuroblastoma tumor antigen. BMC Immunol. 8: 4. 5. Bahi, A. & Dreyer, J.L. (2008) Overexpression of plasminogen activators in the nucleus accumbens enhances cocaine-, amphetamine- and morphine-induced reward and behavioral sensitization. Genes Brain Behav. 7 (2): 244-56. 6. Wrighton, K.H. <i>et al.</i> (2009) Transforming Growth Factor {beta} Can Stimulate Smad1 Phosphorylation Independently of Bone Morphogenic Protein Receptors. J Biol Chem. 284 (15): 9755-63. 7. Diefenbacher, M. <i>et al.</i> (2011) The Dsl1 Tethering Complex Actively Participates in Soluble NSF (N-Ethylmaleimide-sensitive Factor) Attachment Protein Receptor (SNARE) Complex Assembly at the Endoplasmic Reticulum in <i>Saccharomyces cerevisiae</i>. J Biol Chem. 286: 25027-38. 8. Alvarez, M.M. <i>et al.</i> (2010) Specific recognition of influenza A/H1N1/2009 antibodies in human serum: a simple virus-free ELISA method. PLoS One. 5: e10176. 9. Bahi, A. <i>et al.</i> (2008) The role of tissue-type plasminogen activator system in amphetamine-induced conditional place preference extinction and reinstatement. Neuropsychopharmacology. 33: 2726-34.

10. Gunnarsen, K.S. *et al.* (2010) Periplasmic expression of soluble single chain T cell receptors is rescued by the chaperone FkpA. [BMC Biotechnol. 10: 8.](#)
11. Hwang, H.Y. *et al.* (2008) Highly specific inhibition of C1q globular-head binding to human IgG: a novel approach to control and regulate the classical complement pathway using an engineered single chain antibody variable fragment. [Mol Immunol. 45: 2570-80.](#)
12. De Vooght, L. *et al.* (2012) Expression and extracellular release of a functional anti-trypanosome Nanobody® in *Sodalis glossinidius*, a bacterial symbiont of the tsetse fly. [Microb Cell Fact. 11: 23.](#)
13. Saerens, D. *et al.* (2004) Single domain antibodies derived from dromedary lymph node and peripheral blood lymphocytes sensing conformational variants of prostate-specific antigen. [J Biol Chem. 279 \(50\): 51965-72.](#)
14. Than, N.G. *et al.* (2014) Evolutionary origins of the placental expression of chromosome 19 cluster galectins and their complex dysregulation in preeclampsia. [Placenta. 35 \(11\): 855-65.](#)
15. Elders RC *et al.* (2014) Recombinant canine IgE Fc and an IgE Fc-TRAIL fusion protein bind to neoplastic canine mast cells. [Vet Immunol Immunopathol. 159 \(1-2\): 29-40.](#)
16. Chin, S.E. *et al.* (2015) Isolation of high-affinity, neutralizing anti-idiotypic antibodies by phage and ribosome display for application in immunogenicity and pharmacokinetic analyses. [J Immunol Methods. 416: 49-58.](#)
17. Peyrassol, X. *et al.* (2016) Development by Genetic Immunization of Monovalent Antibodies (Nanobodies) Behaving as Antagonists of the Human ChemR23 Receptor. [J Immunol. 196 \(6\): 2893-901.](#)
18. Kim H & Loparo JJ (2016) Multistep assembly of DNA condensation clusters by SMC. [Nat Commun. 7: 10200.](#)
19. Borg M *et al.* (2014) A novel interaction between Rab7b and actomyosin reveals a dual role in intracellular transport and cell migration. [J Cell Sci. 127 \(Pt 22\): 4927-39.](#)
20. De Meyer, T. *et al.* (2015) Comparison of VHH-Fc antibody production in *Arabidopsis thaliana*, *Nicotiana benthamiana* and *Pichia pastoris*. [Plant Biotechnol J. 13 \(7\): 938-47.](#)
21. Siddiqui AA *et al.* (2015) Humoral immune responses to a recombinant *Plasmodium vivax* tryptophan-rich antigen among *Plasmodium vivax*-infected patients and its localization in the parasite. [Appl Biochem Biotechnol. 175 \(4\): 2166-77.](#)
22. Warnecke, A. *et al.* (2017) Nitration of MOG diminishes its encephalitogenicity depending on MHC haplotype. [J Neuroimmunol. 303: 1-12.](#)
23. Bertucci, A. *et al.* (2011) A new coral carbonic anhydrase in *Stylophora pistillata*. [Mar Biotechnol \(NY\). 13 \(5\): 992-1002.](#)
24. Boujon, C.L. *et al.* (2017) Development and validation of an immunohistochemistry procedure for the detection of a neurotropic bovine astrovirus. [J Virol Methods. 239: 26-33.](#)
25. Cartwright, S.P. *et al.* (2017) Rapid expression and purification of the hepatitis delta virus antigen using the methylotropic yeast *Pichia pastoris*. [BMC Res Notes. 10 \(1\): 340.](#)
26. Thanongsaksrikul, J. *et al.* (2018) Identification and production of mouse scFv to specific epitope of enterovirus-71 virion protein-2 (VP2). [Arch Virol. 163 \(5\): 1141-1152.](#)
27. Gunnarsen, K.S. *et al.* (2018) Soluble T-cell receptor design influences functional yield in an E. coli chaperone-assisted expression system. [PLoS One. 13 \(4\): e0195868.](#)
28. Ascione, A. *et al.* (2019) Development of a novel human phage display-derived anti-LAG3 scFv antibody targeting CD8⁺ T lymphocyte exhaustion. [BMC Biotechnol. 19 \(1\): 67.](#)

29. Zoccola, D. *et al.* (2017) Structural and functional analysis of coral Hypoxia Inducible Factor. [PLoS One. 12 \(11\): e0186262.](#)
30. Kimura, K. *et al.* (2021) Overexpression of human BAG3^{P209L} in mice causes restrictive cardiomyopathy. [Nat Commun. 12 \(1\): 3575.](#)
31. Dongdem, J.T. *et al.* (2021) Modification of small ubiquitin-related modifier 2 (SUMO2) by phosphoubiquitin in HEK293T cells. [Proteomics. 21 \(15\): e2000234.](#)
32. Chuang, H.C. *et al.* (2021) Effect of cell-permeable grouper Manganese Superoxide Dismutase on environmental stress in fish. [Protein Expr Purif. 187: 105951.](#)
33. Cheng, C.M. *et al.* (2021) Heterologous expression of bacterial CotA-laccase, characterization and its application for biodegradation of malachite green. [Bioresour Technol. 340: 125708.](#)
34. De Vooght, L. *et al.* (2022) Targeting the tsetse-trypanosome interplay using genetically engineered *Sodalis glossinidius*. [PLoS Pathog. 18 \(3\): e1010376.](#)
35. Minami, S.A. *et al.* (2022) Production of novel SARS-CoV-2 Spike truncations in Chinese hamster ovary cells leads to high expression and binding to antibodies. [Biotechnol J. 17 \(9\): e2100678.](#)
36. Chen, Y.J. *et al.* (2023) A non-genetic engineering platform for rapidly generating and expanding cancer-specific armed T cells. [J Biomed Sci. 30 \(1\): 35.](#)
37. Boudkkazi, S. *et al.* (2023) A Noelin-organized extracellular network of proteins required for constitutive and context-dependent anchoring of AMPA-receptors. [Neuron. 111 \(16\): 2544-56.e9.](#)
38. Nguyen, H.M. *et al.* (2023) Heterologous expression and characterization of a MoAA16 polysaccharide monooxygenase from the rice blast fungus *Magnaporthe oryzae* [Electronic Journal of Biotechnology. 66: 1-16.](#)
39. Rossey, I. *et al.* (2021) A vulnerable, membrane-proximal site in human respiratory syncytial virus F revealed by a prefusion-specific single-domain antibody. [J Virol. 95 \(11\): e02279-20.](#)
40. Khosravi, M. *et al.* (2016) Canine Distemper Virus Fusion Activation: Critical Role of Residue E123 of CD150/SLAM. [J Virol. 90 \(3\): 1622-37.](#)
41. Tamaki, Y. *et al.* (2024) Shiga toxin type 2 B subunit protects mice against toxin challenge when leashed and bundled by a stable pentameric coiled-coil molecule. [Vaccine. Feb 15 S0264-410X\(24\)00129-4. \[Epub ahead of print\].](#)
42. Kimura, T. *et al.* (2024) Quantification of lipoprotein lipase in mouse plasma with a sandwich enzyme-linked immunosorbent assay. [J Lipid Res. 65 \(4\): 100532.](#)
43. Wu, M.C. *et al.* (2022) Recombinant suilysin of *Streptococcus suis* enhances the protective efficacy of an engineered *Pasteurella multocida* toxin protein. [Res Vet Sci. 151: 175-183.](#)
44. Ramou, I. *et al.* (2025) Expression and purification of an activated Orexin receptor 1-G-protein complex [Protein Expression and Purification. : 106660.](#)
45. Paiva, S.C. *et al.* (2025) Exploring the Structure and Nucleic Acid Interactions of the *Leishmania* sp. Telomerase Reverse Transcriptase N-Terminal Region. [Arch Biochem Biophys. : 110289.](#)
46. Hayes JWP, Edwards JC, Ramirez Valdez K *et al.* (0) Evaluation of the contribution of the minor envelope complex glycoprotein 3 to the porcine reproductive and respiratory syndrome virus 1 neutralizing antibody response [version 1]. [VeriXiv 2025. 2:139](#)

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at

-20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
Acknowledgements	His-tag is a registered trademark of EMD Biosciences.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1396G
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M416017:230125'

Printed on 30 Jun 2025