

Datasheet: MCA1396P

BATCH NUMBER 167974

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

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/20 - 1/1000
Immunoprecipitation			▪	
Western Blotting	▪			1/1000 - 1/5000

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 conjugated to Horseradish Peroxidase (HRP) - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.0095% MIT
Approx. Protein	IgG concentration 1.0 mg/ml

Concentrations

Immunogen PAX6 transcription factor linked to histidine tag.

RRID AB_323592

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 *et al.* 2007) and Hwang *et al.* 2008) and non-mammalian (Zheng *et al.* 2007; Gunnarsen *et al.* 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. *et al.* (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. *et al.* (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. *et al.* (2007) Identification of CLEC12B, an inhibitory receptor on myeloid cells. [J Biol Chem. 282 \(31\): 22370-5.](#)
4. Zheng, J. *et al.* (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. *et al.* (2009) Transforming Growth Factor {beta} Can Stimulate Smad1 Phosphorylation Independently of Bone Morphogenetic Protein Receptors. [J Biol Chem. 284 \(15\): 9755-63.](#)
7. Diefenbacher, M. *et al.* (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 *Saccharomyces cerevisiae*. [J Biol Chem. 286: 25027-38.](#)
8. Alvarez, M.M. *et al.* (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. *et al.* (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.](#)

Storage	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
Guarantee	12 months from date of despatch
Acknowledgements	His-tag is a trademark of EMD Biosciences
Health And Safety Information	<p>Material Safety Datasheet documentation #20479 available at: https://www.bio-rad-antibodies.com/SDS/MCA1396P</p> <p>20479</p>

Related Products

Recommended Useful Reagents

[AbGUARD® HRP STABILIZER PLUS \(BUF052A\)](#)

[AbGUARD® HRP STABILIZER PLUS \(BUF052B\)](#)

[AbGUARD® HRP STABILIZER PLUS \(BUF052C\)](#)

[TMB CORE \(BUF056A\)](#)

[TMB CORE+ \(BUF062A\)](#)

[TMB SIGNAL+ \(BUF054A\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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

'M429106:240320'

Printed on 15 Apr 2024