

## Datasheet: MCA1396

<b>Description:</b>	MOUSE ANTI HISTIDINE TAG
<b>Specificity:</b>	HISTIDINE TAG
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AD1.1.10
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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	▪			
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.

<b>Target Species</b>	Synthetic Peptide
<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 Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	PAX6 transcription factor linked to histidine tag.
<b>RRID</b>	AB_322084
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Histidine tag antibody, clone AD1.1.10</b> recognizes proteins and peptides containing the motif 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 <a href="#">de Vooght et al. 2012</a>) cell lines.</p> <p>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.</p> <p>This antibody is routinely tested in Western blotting on histidine tagged recombinant proteins and reacts against all histidine-tagged proteins so far tested.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Els Conrath, K. <i>et al.</i> (2001) Camel single-domain antibodies as modular building units in bispecific and bivalent antibody constructs. <a href="#">J Biol Chem. 276 (10): 7346-50.</a></li> <li>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 F<sub>1</sub> mice. <a href="#">Immunol. 103: 301-309.</a></li> <li>3. Hoffmann, S.C. <i>et al.</i> (2007) Identification of CLEC12B, an inhibitory receptor on myeloid cells. <a href="#">J Biol Chem. 282 (31): 22370-5.</a></li> <li>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. <a href="#">BMC Immunol. 8: 4.</a></li> <li>5. Bahi, A. &amp; Dreyer, J.L. (2008) Overexpression of plasminogen activators in the nucleus accumbens enhances cocaine-, amphetamine- and morphine-induced reward and behavioral sensitization. <a href="#">Genes Brain Behav. 7 (2): 244-56.</a></li> <li>6. Wrighton, K.H. <i>et al.</i> (2009) Transforming Growth Factor {beta} Can Stimulate Smad1 Phosphorylation Independently of Bone Morphogenetic Protein Receptors. <a href="#">J Biol Chem. 284 (15): 9755-63.</a></li> <li>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>. <a href="#">J Biol Chem. 286: 25027-38.</a></li> <li>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. <a href="#">PLoS One. 5: e10176.</a></li> <li>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. <a href="#">Neuropsychopharmacology. 33: 2726-34.</a></li> </ol>

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: 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. Liu, C.C. *et al.* (2016) The Fimbrial Protein is a Virulence Factor and Potential Vaccine Antigen of *Avibacterium paragallinarum*. [Avian Dis. 60 \(3\): 649-55.](#)
25. 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.](#)
26. 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.](#)
27. 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.](#)
28. 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.](#)
29. Ascione, A. *et al.* (2019) Development of a novel human phage display-derived

- anti-LAG3 scFv antibody targeting CD8<sup>+</sup> T lymphocyte exhaustion. [BMC Biotechnol. 19 \(1\): 67.](#)
30. Zoccola, D. *et al.* (2017) Structural and functional analysis of coral Hypoxia Inducible Factor. [PLoS One. 12 \(11\): e0186262.](#)
31. Kimura, K. *et al.* (2021) Overexpression of human BAG3<sup>P209L</sup> in mice causes restrictive cardiomyopathy. [Nat Commun. 12 \(1\): 3575.](#)
32. Dongdem, J.T. *et al.* (2021) Modification of small ubiquitin-related modifier 2 (SUMO2) by phosphoubiquitin in HEK293T cells. [Proteomics. 21 \(15\): e2000234.](#)
33. Chuang, H.C. *et al.* (2021) Effect of cell-permeable grouper Manganese Superoxide Dismutase on environmental stress in fish. [Protein Expr Purif. 187: 105951.](#)
34. 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.](#)
35. De Vooght, L. *et al.* (2022) Targeting the tsetse-trypanosome interplay using genetically engineered *Sodalis glossinidius*. [PLoS Pathog. 18 \(3\): e1010376.](#)
36. 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. Jun 3 \[Epub ahead of print\]](#)

---

**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 trademark of EMD Biosciences.

---

**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

---

**Regulatory** 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> ,<br><a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>   |

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto: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](https://bio-rad-antibodies.com/datasheets)

'M416016:230125'

**Printed on 08 Feb 2023**

---

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)