

# Datasheet: MCA2098P

**BATCH NUMBER 170654**

<b>Description:</b>	MOUSE ANTI HUMAN IgG4:HRP
<b>Specificity:</b>	IgG4
<b>Format:</b>	HRP
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	HP6025
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen	▪			1/40 - 1/80
Immunohistology - Paraffin	▪			
ELISA	▪			1/1000 - 1/20000
Western Blotting			▪	

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>	Human
<b>Species Cross Reactivity</b>	Reacts with: Chimpanzee <b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
<b>Product Form</b>	Purified IgG conjugated to horseradish peroxidase (HRP) - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from ascites
<b>Buffer Solution</b>	Phosphate buffered saline

Preservative Stabilisers	0.0095% MIT
Approx. Protein Concentrations	IgG concentration 1 mg/ml
Immunogen	Purified IgG4
External Database Links	<p><b>UniProt:</b>  <a href="#">P01861</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3503</a>    IGHG4    <a href="#">Related reagents</a></p>
RRID	AB_323679
Fusion Partners	Spleen cells from BALB/c mice were fused with SP2/0 - Ag14 mouse myeloma cell line.
Specificity	<p><b>Mouse anti Human IgG4 antibody, clone HP6025</b> recognizes the heavy chain of human IgG4, at an epitope in the Fc region. No cross-reactivity is observed with IgG1, IgG2, IgG3, IgM, IgA (<a href="#">Jefferis et al. 1985</a>).</p> <p>Elevated levels of IgG4 and of IgG4 presenting plasma cells are frequently seen in patients with autoimmune pancreatitis (IAP) and inflammatory bowel disease (<a href="#">Navaneethan et al. 2011</a>) and it is suggested that IAP may develop as a paraneoplastic syndrome in some cancer patients (<a href="#">Shiokawa et al. 2013</a>)</p>
Histology Positive Control Tissue	Tonsil
References	<ol style="list-style-type: none"> <li>1. Jefferis, R. <i>et al.</i> (1985) Evaluation of monoclonal antibodies having specificity for human IgG sub-classes: results of an IUIS/WHO collaborative study. <a href="#">Immunol Lett. 10 (3-4): 223-52.</a></li> <li>2. Black, C.M. <i>et al.</i> (1991) Human markers for IgG2 and IgG4 appear to be on the same molecule in the chimpanzee. <a href="#">Immunology.72: 94-8.</a></li> <li>3. Yamashita, K. <i>et al.</i> (2008) Degree of IgG4+ plasma cell infiltration in retroperitoneal fibrosis with or without multifocal fibrosclerosis <a href="#">Histopathology. 52: 404-9.</a></li> <li>4. Yamashita, K. <i>et al.</i> (2008) Lung involvement in IgG4-related lymphoplasmacytic vasculitis and interstitial fibrosis: report of 3 cases and review of the literature. <a href="#">Am J Surg Pathol. 32: 1620-6.</a></li> <li>5. Miyagawa-Hayashino, A. <i>et al.</i> (2009) High ratio of IgG4-positive plasma cell infiltration in cutaneous plasmacytosis--is this a cutaneous manifestation of IgG4-related disease? <a href="#">Hum Pathol. 40: 1269-77.</a></li> <li>6. Fernandez-Becerra, C. (2010) Naturally-acquired humoral immune responses against the N- and C-termini of the <i>Plasmodium vivax</i> MSP1 protein in endemic regions of Brazil and Papua New Guinea using a multiplex assay. <a href="#">Malar J. 9: 29.</a></li> <li>7. Agaimy, A. <i>et al.</i> (2010) Calcifying fibrous tumor of the stomach: clinicopathologic and molecular study of seven cases with literature review and reappraisal of histogenesis. <a href="#">Am</a></li> </ol>

[J Surg Pathol. 34: 271-8.](#)

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21. Koneczny, I. *et al.* (2024) A retrospective multicenter study on clinical and serological parameters in patients with MuSK myasthenia gravis with and without general immunosuppression. [Front Immunol. 15: 1325171.](#)

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety**

Material Safety Datasheet documentation #20479 available at:

**Information** <https://www.bio-rad-antibodies.com/SDS/MCA2098P>

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**Regulatory** For research purposes only

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## 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+ \(BUF054A\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://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](http://bio-rad-antibodies.com/datasheets)

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