

## Datasheet: MCA2118

<b>Description:</b>	MOUSE ANTI HUMAN GRANZYME B
<b>Specificity:</b>	GRANZYME B
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	GB7
<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 (1)	▪			1/50 - 1/200
ELISA		▪		
Immunoprecipitation			▪	
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.

**(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

<b>Target Species</b>	Human
<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>	TRIS buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Recombinant Granzyme B.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P10144</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3002</a>    GZMB    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CGL1, CSPB, CTLA1, GRB
<b>RRID</b>	AB_323716
<b>Fusion Partners</b>	Spleen cells from immunized Balb/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human Granzyme B antibody, clone GB7</b> recognizes the serine protease Granzyme B, expressed within the granules of cytolytic lymphocytes (CTLs)</p> <p>Granzyme B plays a key role in the induction of apoptosis by CTLs. After delivery to the target cell Granzyme B activates the cascade of caspases that finally results in cell death.</p> <p>Mouse anti Human Granzyme B antibody, clone GB7 has been reported to be suitable for Western Blotting, demonstrating reactivity with recombinant granzyme B and also reactivity with recombinant granzyme H (<a href="#">Sedelies et al. 2004</a>). Human granzymes B and H share ~71% sequence identity by clustal analysis.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Kummer, J.A. <i>et al.</i> (1993) Production and characterization of monoclonal antibodies raised against recombinant human granzymes A and B and showing cross reactions with the natural proteins. <a href="#">J Immunol Methods. 163 (1): 77-83.</a></li> <li>2. Nield, L.E. <i>et al.</i> (2002) Endocardial fibroelastosis associated with maternal anti-Ro and anti-La antibodies in the absence of atrioventricular block. <a href="#">J Am Coll Cardiol. 40: 796-802.</a></li> <li>3. Himmelein, S. <i>et al.</i> (2015) Latent herpes simplex virus 1 infection does not induce apoptosis in human trigeminal Ganglia. <a href="#">J Virol. 89 (10): 5747-50.</a></li> <li>4. Cohen, M. <i>et al.</i> (2018) Epstein-Barr virus lytic cycle involvement in diffuse large B cell lymphoma. <a href="#">Hematol Oncol. 36 (1): 98-103.</a></li> <li>5. Sedelies, K.A. <i>et al.</i> (2004) Discordant regulation of granzyme H and granzyme B expression in human lymphocytes. <a href="#">J Biol Chem. 279 (25): 26581-7.</a></li> </ol>
<b>Storage</b>	<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>

<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10057 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2118">https://www.bio-rad-antibodies.com/SDS/MCA2118</a> 10057
<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 IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</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 (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

<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>
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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)  
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