

Datasheet: MCA2469

**BATCH NUMBER 149635**

<b>Description:</b>	MOUSE ANTI HUMAN GLUCOCORTICOID RECEPTOR
<b>Specificity:</b>	GLUCOCORTICOID RECEPTOR
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	5E4
<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
Flow Cytometry (1)	▪			Neat - 1/10

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

**(1)Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Mouse <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 - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.1% Sodium Azide (NaN <sub>3</sub> )

<b>Stabilisers</b>	0.1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 1 mg/ml
<b>Immunogen</b>	26 amino acid peptide corresponding to residues 150-176 on human GCR linked to thyroglobulin.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P04150</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">2908</a>   NR3C1   <a href="#">Related reagents</a></p>
<b>Synonyms</b>	GRL
<b>RRID</b>	AB_10844347
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the mouse Sp-2/0 Ag14 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human Glucocorticoid Receptor antibody, clone 5E4</b> recognizes the human glucocorticoid receptor, also known as Nuclear receptor subfamily 3 group C member 1 (NR3C1), a 777 amino acid receptor bearing 3 distinct functional domains, an N-terminal modulating domain, a DNA binding domain and a C-terminal steroid binding domain. The human glucocorticoid receptor is located either in the cytoplasm of cells, prior to ligand binding associated with certain heat shock proteins (<a href="#">Kino et al. 2009</a>), or the nucleus following binding to ligand (<a href="#">Verb et al. 1978</a>).</p> <p>Mutations in the glucocorticoid receptor gene can lead to familial glucocorticoid resistance, characterized by elevated plasma cortisol levels (<a href="#">Malchoff et al. 1993</a>).</p> <p>Mouse anti human glucocorticoid receptor antibody, clone 5E4 has been demonstrated to cross-react with the murine glucocorticoid receptor (<a href="#">Bergquist et al. 2014</a>)</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Berki, T. <i>et al.</i> (1998) Production and flow cytometric application of a monoclonal anti-glucocorticoid receptor antibody. <a href="#">J Immunol Methods. 214 (1-2): 19-27.</a></li> <li>2. Kim, S.Y. <i>et al.</i> (2010) Effect of p16 on glucocorticoid response in a B-cell lymphoblast cell line <a href="#">Korean J Pediatr 53: 753-8</a></li> <li>3. Bergquist, M. <i>et al.</i> (2014) Glucocorticoid receptor function is decreased in neutrophils during endotoxic shock. <a href="#">J Infect. pii: S0163-4453(14)00081-4.</a></li> <li>4. Hodge, G. <i>et al.</i> (2015) Lymphocyte senescence in COPD is associated with loss of glucocorticoid receptor expression by pro-inflammatory/cytotoxic lymphocytes. <a href="#">Respir Res. 16 (1): 2.</a></li> <li>5. Bergquist, M. <i>et al.</i> (2016) Glucocorticoid receptor expression and binding capacity in</li> </ol>

- patients with burn injury. [Acta Anaesthesiol Scand. 60 \(2\): 213-21.](#)
6. Bergquist, M. *et al.* (2015) Impairment of neutrophilic glucocorticoid receptor function in patients treated with steroids for septic shock. [Intensive Care Med Exp. 3 \(1\): 59.](#)
  7. Bergquist, M. *et al.* (2013) Expression of the glucocorticoid receptor is decreased in experimental *Staphylococcus aureus* sepsis. [J Infect. 67 \(6\): 574-83.](#)
  8. Fragala, M.S. *et al.* (2011) Glucocorticoid receptor expression on human B cells in response to acute heavy resistance exercise. [Neuroimmunomodulation. 18 \(3\): 156-64.](#)
  9. Hodge, G. *et al.* (2015) Lymphocyte senescence in COPD is associated with loss of glucocorticoid receptor expression by pro-inflammatory/cytotoxic lymphocytes. [Respir Res. 16: 2.](#)
  10. Liddicoat, D.R. *et al.* (2014) The glucocorticoid receptor 1A3 promoter correlates with high sensitivity to glucocorticoid-induced apoptosis in human lymphocytes. [Immunol Cell Biol. 92 \(10\): 825-36.](#)
  11. Hodge, G. *et al.* (2018) Bronchiolitis obliterans syndrome is associated with increased p-glycoprotein expression and loss of glucocorticoid receptor from steroid resistant pro-inflammatory CD8+T cells. [Clin Exp Immunol. Jan 20 \[Epub ahead of print\].](#)

<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2469">https://www.bio-rad-antibodies.com/SDS/MCA2469</a></p> <p>10041</p>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</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>
Goat Anti Mouse IgG (STAR77...)	<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>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>

### Recommended Negative Controls

## MOUSE IgG1 NEGATIVE CONTROL (MCA928)

<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)  
'M366993:200529'

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