

## Datasheet: MCA2469F

<b>Description:</b>	MOUSE ANTI HUMAN GLUCOCORTICOID RECEPTOR:FITC
<b>Specificity:</b>	GLUCOCORTICOID RECEPTOR
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	5E4
<b>Isotype:</b>	IgG1
<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 (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 permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.**

Target Species	Human		
Species Cross Reactivity	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.		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by ion exchange chromatography from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		

<b>Preservative Stabilisers</b>	<0.1% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 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_566983
<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 <i>et al.</i> 2009</a>), or the nucleus following binding to ligand (<a href="#">Werb <i>et al.</i> 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 <i>et al.</i> 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 <i>et al.</i> 2014</a>)</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> 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. Bergquist, M. <i>et al.</i> (2016) Glucocorticoid receptor expression and binding capacity in patients with burn injury. <a href="#">Acta Anaesthesiol Scand. 60 (2): 213-21.</a></li> <li>5. Bergquist, M. <i>et al.</i> (2015) Impairment of neutrophilic glucocorticoid receptor function in</li> </ol>

- patients treated with steroids for septic shock. [Intensive Care Med Exp. 3 \(1\): 59.](#)
6. Bergquist, M. *et al.* (2013) Expression of the glucocorticoid receptor is decreased in experimental *Staphylococcus aureus* sepsis. [J Infect. 67 \(6\): 574-83.](#)
7. 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.](#)
8. 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 \(1\): 2.](#)
9. 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.](#)
10. Kowalik, A. *et al.* (2013) Dexamethasone-FITC staining application for measurement of circadian rhythmicity of glucocorticoid receptor expression in mouse living thymocyte subsets. [J Neuroimmunol. 261 \(1-2\): 44-52.](#)
11. Hodge, G. *et al.* (2018) Bronchiolitis obliterans syndrome is associated with increased p-glycoprotein expression and loss of glucocorticoid receptor from steroid-resistant proinflammatory CD8(+) T cells. [Clin Exp Immunol. 192 \(2\): 242-50.](#)
12. Yu, Y. *et al.* (2022) Glucocorticoid receptor expression in patients with cardiac arrest in the early period after the return of spontaneous circulation: a prospective observational single-centre study [BMJ Open. 12 \(9\): e060246.](#)
13. Hodge, G. *et al.* (2022) COPD is associated with increased pro-inflammatory CD28null CD8 T and NKT-like cells in the small airways. [Clin Exp Immunol. 207 \(3\): 351-9.](#)
14. Li, J. *et al.* (2021) Leukocyte glucocorticoid receptor expression and related transcriptomic gene signatures during early sepsis. [Clin Immunol. 223: 108660.](#)

<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. This product is photosensitive and should be protected from light.</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/MCA2469F10041">https://www.bio-rad-antibodies.com/SDS/MCA2469F10041</a></p>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

## HUMAN SEROBLOCK (BUF070B)

**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)

'M404201:220820'

**Printed on 25 Jul 2024**

---

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)