

Datasheet: MCA2469F

BATCH NUMBER 164242

Description:	MOUSE ANTI HUMAN GLUCOCORTICOID RECEPTOR:FITC
Specificity:	GLUCOCORTICOID RECEPTOR
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	5E4
Isotype:	IgG1
Quantity:	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.

	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 N.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
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	26 amino acid peptide corresponding to residues 150-176 on human GCR linked to thyroglobulin.
External Database Links	<p>UniProt: P04150 Related reagents</p> <p>Entrez Gene: 2908 NR3C1 Related reagents</p>
Synonyms	GRL
RRID	AB_566983
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse Sp-2/0 Ag14 myeloma cell line.
Specificity	<p>Mouse anti Human Glucocorticoid Receptor antibody, clone 5E4 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 (Kino et al. 2009), or the nucleus following binding to ligand (Werb et al. 1978).</p> <p>Mutations in the glucocorticoid receptor gene can lead to familial glucocorticoid resistance, characterized by elevated plasma cortisol levels (Malchoff et al. 1993).</p> <p>Mouse anti human glucocorticoid receptor antibody, clone 5E4 has been demonstrated to cross-react with the murine glucocorticoid receptor (Bergquist et al. 2014)</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Berki, T. <i>et al.</i> (1998) Production and flow cytometric application of a monoclonal anti-glucocorticoid receptor antibody. J Immunol Methods. 214 (1-2): 19-27. Kim, S.Y. <i>et al.</i> (2010) Effect of p16 on glucocorticoid response in a B-cell lymphoblast cell line Korean J Pediatr 53: 753-8 Bergquist, M. <i>et al.</i> (2014) Glucocorticoid receptor function is decreased in neutrophils during endotoxic shock. J Infect. pii: S0163-4453(14)00081-4. Bergquist, M. <i>et al.</i> (2016) Glucocorticoid receptor expression and binding capacity in patients with burn injury. Acta Anaesthesiol Scand. 60 (2): 213-21.

5. 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.](#)
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.](#)

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. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2469F>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

[HUMAN SEROBLOCK \(BUF070B\)](#)

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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

'M404201:220820'

Printed on 05 Feb 2024

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