

Datasheet: MCA2469

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| Description: | MOUSE ANTI HUMAN GLUCOCORTICOID RECEPTOR |
| Specificity: | GLUCOCORTICOID RECEPTOR |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | 5E4 |
| Isotype: | IgG1 |
| Quantity: | 0.2 mg |

Product Details

RRID AB_10844347

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

Target Species Human

Species Cross Reactivity Reacts with: Mouse
N.B. Antibody reactivity and working conditions may vary between species.

Product Form Purified IgG - liquid

Preparation Purified IgG prepared by affinity chromatography

Buffer Solution Phosphate buffered saline

Preservative 0.1% Sodium Azide (NaN₃)
Stabilisers 0.1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 1 mg/ml

Immunogen 26 amino acid peptide corresponding to residues 150-176 on human GCR linked to thyroglobulin.

**External Database
Links**

UniProt:

[P04150](#) [Related reagents](#)

Entrez Gene:

[2908](#) NR3C1 [Related reagents](#)

Synonyms

GRL

Fusion Partners

Spleen cells from immunised Balb/c mice were fused with cells of the mouse Sp-2/0 Ag14 myeloma cell line.

Specificity

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](#)).

Mutations in the glucocorticoid receptor gene can lead to familial glucocorticoid resistance, characterized by elevated plasma cortisol levels ([Malchoff et al. 1993](#)).

Mouse anti human glucocorticoid receptor antibody, clone 5E4 has been demonstrated to cross-react with the murine glucocorticoid receptor ([Bergquist et al. 2014](#))

Flow Cytometry

Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

1. Berki, T. *et al.* (1998) Production and flow cytometric application of a monoclonal anti-glucocorticoid receptor antibody. [J Immunol Methods. 214 \(1-2\): 19-27.](#)
2. Kim, S.Y. *et al.* (2010) Effect of p16 on glucocorticoid response in a B-cell lymphoblast cell line [Korean J Pediatr 53: 753-8](#)
3. Bergquist, M. *et al.* (2014) Glucocorticoid receptor function is decreased in neutrophils during endotoxic shock. [J Infect. pii: S0163-4453\(14\)00081-4.](#)
4. 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.](#)
5. Bergquist, M. *et al.* (2016) Glucocorticoid receptor expression and binding capacity in 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 \[Epub ahead of print\].](#)

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| Storage | Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. |
| Guarantee | 18 months from date of despatch. |
| Health And Safety Information | Material Safety Datasheet documentation #10304 available at: 10304: https://www.bio-rad-antibodies.com/uploads/MSDS/10304.pdf |
| Regulatory | For research purposes only |

Related Products

Recommended Secondary Antibodies

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| Goat Anti Mouse IgG IgA IgM (STAR87...) | Alk. Phos. , HRP |
| Goat Anti Mouse IgG (STAR77...) | HRP |
| Rabbit Anti Mouse IgG (STAR12...) | RPE |
| Rabbit Anti Mouse IgG (STAR8...) | DyLight@800 |
| Rabbit Anti Mouse IgG (STAR13...) | HRP |
| Goat Anti Mouse IgG (STAR76...) | RPE |
| Goat Anti Mouse IgG (STAR70...) | FITC |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC , HRP |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |
| Goat Anti Mouse IgG (H/L) (STAR117...) | Alk. Phos. , DyLight@488 , DyLight@680 , DyLight@800 , FITC , HRP |

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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|----------------------------------|---|------------------|---|---------------|---|
| North & South America | Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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 | Europe | Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com |
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