Datasheet: MCA2469F

BATCH NUMBER 180829

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 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. 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	0.09% Sodium Azide 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	**UniProt:** P04150 Related reagents **Entrez Gene:** 2908 NR3C1 Related reagents
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	**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 $1x10^6$ 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].

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	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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Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: 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

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