Datasheet: MCA2250

BATCH NUMBER 154573

Description:	RAT ANTI HUMAN INTERLEUKIN-10
Specificity:	IL-10
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	JES3-12G8
Isotype:	IgG2a
Quantity:	0.5 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)	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (2)	▪			1/50 - 1/100
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			1/50 - 1/250

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 the 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.**

(2)**This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.Sodium citrate buffer pH 6.0 is recommended for this purpose.**

Target Species

Human

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN_3)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human IL-10 expressed by COS cells.
External Database Links	**UniProt:** P22301 Related reagents **Entrez Gene:** 3586 IL10 Related reagents
RRID	AB_2125383
Specificity	**Rat anti Human Interleukin-10 antibody, clone JES3-12G8** recognizes human Interleukin-10 (IL-10). IL-10 is expressed by activated CD8+ peripheral blood T-cells, activated T-helper CD4+ T cell clones mast cells, B cell lymphomas and LPS activated monocytes. Rat anti Human Interleukin-10 antibody, clone JES3-12G8 is reported to neutralize the effects of IL-10 (Abrams *et al.* 1992).
Flow Cytometry	Use 10ul of the suggested working dilution to label $1x10^6$ cells in 100ul.
Histology Positive Control Tissue	Human Tonsil
References	1. Burdin, N. *et al.* (1993) Epstein-Barr virus transformation induces B lymphocytes to produce human interleukin 10. J Exp Med. 177 (2): 295-304. 2. Abrams, J.S. *et al.* (1992) Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. Immunol Rev. 127: 5-24. 3. Yssel, H. *et al.* (1992) IL-10 is produced by subsets of human CD4+ T cell clones and peripheral blood T cells. J Immunol. 149 (7): 2378-84. 4. O'Farrell, A.M. *et al.* (1998) IL-10 inhibits macrophage activation and proliferation by distinct signaling mechanisms: evidence for Stat3-dependent and -independent pathways. EMBO J. 17 (4): 1006-18. 5. Wakkach, A. *et al.* (2001) Differentiation of regulatory T cells 1 is induced by CD2 costimulation. J Immunol. 167: 3107-13. 6. Zajac, A. <>et al. (2007) Protein microarrays and quantum dot probes for early cancer detection. Colloids Surf B Biointerfaces. 58: 309-14. 7. Dybiec, M. *et al.* (2007) Photoluminescence spectroscopy of bioconjugated CdSe⁄ZnS quantum dots Applied Physics Letters. 90 (26): 263112.

8. Ramgir, N.S. *et al.* (2007) Voltammetric Detection of Cancer Biomarkers Exemplified by Interleukin-10 and Osteopontin with Silica Nanowires The Journal of Physical Chemistry C. 111 (37): 13981-7.
9. van der Vlugt, L.E.P.M. *et al.* (2014) $CD24^{(hi)}CD27^{(+)}$ B cells from patients with allergic asthma have impaired regulatory activity in response to lipopolysaccharide. Clin Exp Allergy. 44 (4): 517-28.
10. Prosniak, M. *et al.* (2013) Glioma grade is associated with the accumulation and activity of cells bearing M2 monocyte markers. Clin Cancer Res. 19 (14): 3776-86.
11. Zhang, W. *et al.* (2013) Myeloid clusters are associated with a pro-metastatic environment and poor prognosis in smoking-related early stage non-small cell lung cancer. PLoS One. 8 (5): e65121.
12. van der Vlugt, E.P.M. *et al.* (2014) Toll-like receptor ligation for the induction of regulatory B cells. Methods Mol Biol. 1190: 127-41.
13. Ramos, R.N. *et al.* (2020) $CD163^{+}$ tumor-associated macrophage accumulation in breast cancer patients reflects both local differentiation signals and systemic skewing of monocytes. Clin Transl Immunology. 9 (2): e1108.

Further Reading	1. Gomes, J.A. *et al.* (2003) Evidence that development of severe cardiomyopathy in human Chagas' disease is due to a Th1-specific immune response. Infect Immun. 71 (3): 1185-93.
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. 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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2250 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550, DyLight®650, DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos., Biotin

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M366449:200529'

Printed on 18 Jan 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint