

## Datasheet: MCA1975

<b>Description:</b>	RAT ANTI MOUSE ART2.2
<b>Specificity:</b>	ART2.2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	Nika102
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.25 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	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			

Where this product 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 product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein</b>	IgG concentration 1.0mg/ml

## Concentrations

Immunogen pME.CD8LF-ART2.2

## External Database Links

### UniProt:

[O35975](#) [Related reagents](#)

### Entrez Gene:

[11872](#) Art2b [Related reagents](#)

Synonyms Rt6.2, Rt6-2

RRID AB\_2258718

Fusion Partners Spleen cells from immunized wistar rats were fused with cells of the Sp2/0 mouse myeloma cell line.

Specificity **Rat anti Mouse ART2.2 antibody, clone Nika102** recognizes the gene product of the mouse ADP-ribosyltransferase (ART) 2.2 gene, an ortholog of rat RT6. ART2.2 expressed exclusively by mature T-cells. Levels of ART2.2 expression vary between inbred strains of mice and is absent in NZW mice, in which the ART2.2 gene is deleted ([Koch-Nolte et al. 1999](#)).

Flow Cytometry Use 10 $\mu$ l of the suggested working dilution to label 10<sup>6</sup> cells in 100 $\mu$ l

## References

1. Koch-Nolte, F. *et al.* (1999) A new monoclonal antibody detects a developmentally regulated mouse ecto-ADP-ribosyltransferase on T cells: subset distribution, inbred strain variation, and modulation upon T cell activation. [J Immunol. 163 \(11\): 6014-22.](#)
2. Adriouch, S. *et al.* (2001) Rapid induction of naive T cell apoptosis by ecto-nicotinamide adenine dinucleotide: requirement for mono(ADP-ribosyl)transferase 2 and a downstream effector. [J Immunol. 167:196-203](#)
3. Kahl, S. *et al.* (2000) Metalloprotease-mediated shedding of enzymatically active mouse ecto-ADP-ribosyltransferase ART2.2 upon T cell activation. [J Immunol. 165:4463-9.](#)
4. Ablamunits, V. *et al.* (2001) Changing patterns of cell surface mono (ADP-ribosyl) transferase antigen ART2.2 on resting versus cytopathically-activated T cells in NOD/Lt mice. [Diabetologia. 44 \(7\): 848-58.](#)
5. Adriouch, S. *et al.* (2007) NAD<sup>+</sup> released during inflammation participates in T cell homeostasis by inducing ART2-mediated death of naive T cells *in vivo*. [J Immunol. 179 \(1\): 186-94.](#)
6. Menzel, S. *et al.* (2015) Nucleotide-Induced Membrane-Proximal Proteolysis Controls the Substrate Specificity of T Cell Ecto-ADP-Ribosyltransferase ART2.2. [J Immunol. 195 \(5\): 2057-66.](#)
7. Heiss K *et al.* (2008) High sensitivity of intestinal CD8<sup>+</sup> T cells to nucleotides indicates P2X7 as a regulator for intestinal T cell responses. [J Immunol. 181 \(6\): 3861-9.](#)

## 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.

---

<b>Guarantee</b>	12 months from date of despatch
------------------	---------------------------------

---

<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1975">https://www.bio-rad-antibodies.com/SDS/MCA1975</a> 10040
--------------------------------------	--

---

<b>Regulatory</b>	For research purposes only
-------------------	----------------------------

---

## Related Products

### Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@800</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight@800</a>

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

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

'M412419:221111'

Printed on 25 Mar 2023