

## Datasheet: MCA2363

<b>Description:</b>	RAT ANTI MOUSE CD122
<b>Specificity:</b>	CD122
<b>Other names:</b>	INTERLEUKIN-2 RECEPTOR BETA CHAIN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	TM-BETA 1
<b>Isotype:</b>	IgG2b
<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	■			1/50 - 1/100
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation	■			
Western Blotting			■	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system to a concentration equivalent to their test reagent.

<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
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Cells from murine IL-2RB <sup>+</sup> transformant TART-mBeta.

**External Database  
Links**

**UniProt:**

[P16297](#)

[Related reagents](#)

**Entrez Gene:**

[16185](#)

IL2rb

[Related reagents](#)

**Fusion Partners**

Lymph node cells from immunised Sprague Dawley rats were fused with cells of the mouse PA1 myeloma cell line.

**Specificity**

**Rat anti Mouse CD122 antibody, clone TM-BETA 1** recognizes the murine CD122 cell surface glycoprotein, a ~75-85 kDa molecule also known as interleukin-2 receptor (IL-2R) beta chain. In mouse, CD122 is primarily expressed on natural killer (NK) cells and at lower levels on lymphocyte subsets, monocytes and macrophages.

CD122 can associate with the IL-2R alpha chain (CD25) and CD132 to form a functional high affinity receptor complex that binds IL-2. CD132/CD122 heterodimers can also be formed which bind IL-2 with intermediate affinity. IL-2 binding to the IL-2R is important in the generation and differentiation of T lymphocytes and NK cells.

Rat anti Mouse CD122 antibody, clone TM-BETA 1 blocks IL-2 high affinity binding to the IL-2R beta receptor ([Tanaka \*et al.\* 1991](#)).

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

**References**

1. Tanaka, T. *et al.* (1991) A novel monoclonal antibody against murine IL-2 receptor beta-chain. Characterization of receptor expression in normal lymphoid cells and EL-4 cells. [J Immunol. 147 \(7\): 2222-8.](#)
2. Leung, K.T. (2011) The tetraspanin CD9 regulates migration, adhesion, and homing of human cord blood CD34+ hematopoietic stem and progenitor cells. [Blood. 117: 1840-50.](#)
3. Chenoweth, M.J. *et al.* (2012) IL-15 Can Signal via IL-15Rα, JNK, and NF-κB To Drive RANTES Production by Myeloid Cells. [J Immunol. 188: 4149-57.](#)
4. Mertens, J. *et al.* (2009) Streptococcus pneumoniae serotype 1 capsular polysaccharide induces CD8CD28 regulatory T lymphocytes by TCR crosslinking. [PLoS Pathog. 5 \(9\): e1000596.](#)

**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

**Shelf Life**

18 months from date of despatch.

**Health And Safety  
Information**

Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

**Regulatory**

For research purposes only

## Related Products

## Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®649</a> , <a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>

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