

## **Product datasheet for BM4102**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# Cd8a Mouse Monoclonal Antibody [Clone ID: Rib 6/1]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: Rib 6/1
Applications: FC, IHC

**Recommended Dilution:** Immunohistochemistry on frozen sections (1 µg/ml; 1:200).

Suggested positive control: rat spleen.

Does not react on routinely processed paraffin sections. Flow cytometry (use 10 µl of neat antibody to label 10e6 cells).

**Reactivity:** Rat **Host:** Mouse

**Isotype:** lgG1

Immunogen:

Clonality: Monoclonal

**Specificity:** This antibody detcts T-cell subpopulation, thmocytes.

Rat lymphoblasts

Antigen distribution: Isolated cells: Subpopulation of T-cells in the peripheral blood.

Tissue sections: Rib 6/1 detects the T-cell regions in lymphoid organs and stains cortical and

medullary thymocytes positively.

Monoclonal antibody Rib 6/1 is used for the identification of CD8 bearing cells, mainly Tcytotoxic and suppressor lymphocytes, in tissue sections and isolated cell suspensions. Preliminary results indicate that the Rib 6/1 antigen is the  $\beta$ -chain of the CD8 antigen which is

not expressed by NK-cells.

Formulation: Phosphate buffered saline pH 7.2 (PBS), 10 mg/ml bovine serum albumin (BSA) as a stabilizer

and 0.01 % thimerosal as a preservative

State: Purified

State: Lyophilized Ig fraction

**Reconstitution Method:** Restore with 0.5 ml distilled water.

**Purification:** Affinity chromatography

**Conjugation:** Unconjugated

Storage: Store lyophilized at 2 - 8 °C and reconstituted at -20 °C. Avoid repeated freezing and thawing.

**Stability:** Shelf life: One year from despatch.



### Cd8a Mouse Monoclonal Antibody [Clone ID: Rib 6/1] - BM4102

Gene Name: CD8a molecule

Database Link: Entrez Gene 24930 Rat

P07725

**Background:** The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that

mediates efficient cell to cell interactions within the immune system. The CD8 antigen, acting as a coreceptor, and the T cell receptor on the T lymphocyte recognize antigen displayed by an antigen presenting cell (APC) in the context of class I MHC molecules. The functional coreceptor is either a homodimer composed of two alpha chains, or a heterodimer composed of one alpha and one beta chain. Both alpha and beta chains share significant

homology to immunoglobulin variable light chains.

Synonyms: CD8 alpha chain, CD8A, MAL

**Note:** Cross reactivity with human monocytes has been observed in FACS.

Protocol: Protocol with frozen, ice-cold acetone-fixed sections: The whole procedure is performed at room temperature

1. Wash in PBS

2. Block endogenous peroxidase

3. Wash in PBS

4. Block with 10% normal goat serum in PBS for 30 min. in a humid chamber

5. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber

6. Wash in PBS

7. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG (H+L) minimal-cross reaction to rat) for 1h in a humid chamber

8. Wash in PBS

9. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.

10. Wash in PBS

11. Counterstain with Mayer's hemalum

### **Product images:**

% Positive Cells

		CD8		CD4	
8	antibody	Rib 6/1	OX-8	Rib 5/2	W3/25
100	source:				
	Lymphnode	16	16	46	43
	Spleen	13	13	31	30
	Peripheral Blood	25	26	48	49

Comparison of CD4 and CD8 Monoclonal antibodies performed by flow cytometry

Courtesy of Dr. Lehmann, University of Rostock, Germany.