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

Product datasheet for BM4101

Cd4 Mouse Monoclonal Antibody [Clone ID: Rib 5/2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	Rib 5/2
Applications:	FC, FN, IHC
Recommended Dilution:	Suitable for Immunohistochemistry (IHC); has been described to work in FACS (see Table 1). Recommended Dilutions for IHC: Frozen sections: 1.5 µg/ml (1/200) Paraffin sections: does not react on routinely processed paraffin sections.
Reactivity:	Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Lymphoblasts.
Specificity:	Recognizes a subpopulation of rat T-cells (T-lymphocytes and thymocytes, monocytes, macrophages). Rib 5/2 detects an epitope of the CD4 53kD glycoprotein on the cell surface. It is used for the identifcation of CD4 bearing cells, mainly T-helper / inducer lymphocytes. Rib 5/2 stains T-cell areas in the spleen and lymphnodes well. In the thymus Rib 5/2 detects cortical and medullary thymocytes. It recognises tissue macrophages and Th-cells according to the CD 4 distribution. It can also be applied for in vivo blocking of CD4 mediated immunological reactions.
Formulation:	PBS, pH 7.2 containing 0.01% Thiomerosal as preservative and 10 mg/ml BSA as stabilizer. State: Purified State: Lyophilized purified Ig fraction.
Reconstitution Method:	Restore with 0.5 ml distilled water.
Concentration:	0.3 mg/ml
Purification:	Affinity chromatography.
Conjugation:	Unconjugated

View online »

Storage: Store the antibody at 2-8°C for one month or (in aliquots) at -20°C for longer.
Do not freeze working dilutions
Avoid repeated freezing and thawing.

Stability: Shelf life: One year from despatch.

Gene Name: Cd4 molecule

Database Link: Entrez Gene 24932 Rat
P05540

Background: CD4 is a single chain transmembraneous glycoprotein (59 kDa) which belongs to the immunoglobulin superfamily. CD4 is present on a subset of T lymphocytes ("helper/inducer" T cells) and is also expressed at a lower level on monocytes, tissue macrophages and granulocytes. The antigen is involved in binding to MHC class II molecules. The intracellular domain of the antigen is associated with p56lck protein tyrosine kinase.

Synonyms: T-cell surface antigen T4/Leu-3

Note: 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 30min. 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

	CD4		CD8	
Isolated cells from:	Rib 5/2	W3/25	Rib 6/1	Ox-8
Lymph node	46	43	16	16
Spleen	31	30	13	13
Peripheral blood	48	49	25	26

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

Table 1. Comparison of CD4 and CD8 Monoclonal antibodies performed by Flow cytometry.