

## Product datasheet for **BM4013**

### B-Cells (pan) Mouse Monoclonal Antibody [Clone ID: Ki-B1R]

#### Product data:

Product Type: Primary Antibodies

Clone Name: Ki-B1R

Applications: FC, IHC

Recommended Dilution: **Immunohistochemistry on Frozen sections:** 1 µg/ml (1/100).

**Immunohistochemistry on Paraffin sections:** 10 µg/ml (1/10). No antigen retrieval required, microwave treatment may enhance the reactivity.

*Suggested Positive Control:* Rat spleen.

Has been described to work in **FACS**.

Reactivity: Rat

Host: Mouse

Isotype: IgG1

Clonality: Monoclonal

Immunogen: Rat lymphocytes

**Specificity:** Monoclonal Rat B-lymphocyte antibody BM4013 (clone Ki-B1R) is a pan B-cell marker useful for detecting B-lymphocytes and plasma cells in cell suspensions and tissue sections. Ki-B1R recognises a surface antigen of 47 kD molecular weight, which appears as a single band under reducing conditions in SDS-PAGE.

The antibody is specific for Rat mature B-lymphocytes and plasma cells. Other species not tested.

#### **Antigen Distribution:**

**Isolated Cells:** In a test comparing the immunophenotype of rat blood lymphocytes, Ki-B1R recognised 19% +/- 3% of peripheral blood lymphocytes (n=5).

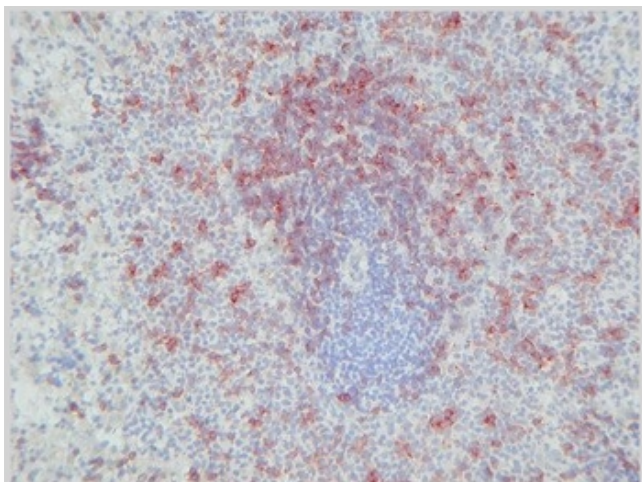
In the same test, 18% +/- 3% of the lymphocytes stained positive for sIg, whereas 79% +/- 3% stained positive with Ki-T1R, the rat pan T-cell marker.

**Tissue Sections:** Ki-B1R shows a staining pattern similar to that of anti-rat immunoglobulin markers. Follicular mantle B-lymphocytes are strongly positive whereas staining of germinal centre B-lymphocytes depends on the immunological status of the lymphoid organ. In the gastrointestinal tract, the typical mucosa-associated lymphoid tissue (MALT) selectively displays the B-follicles, mostly those containing prominent germinal centres. The reactivity pattern of Ki-B1R does not change when applied in vivo.



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<b>Formulation:</b>	PBS, pH 7.2 with 10 mg/ml BSA as a stabilizer and 0.01% thimerosal as a preservative State: Purified State: Lyophilized purified IgG fraction
<b>Reconstitution Method:</b>	Restore with 0.5 ml distilled water.
<b>Concentration:</b>	0.1 mg/ml (after reconstitution)
<b>Purification:</b>	Affinity chromatography
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Background:</b>	B cells are lymphocytes that play a large role in the humoral immune response as opposed to the cell-mediated immune response that is governed by T cells. The abbreviation "B" comes from bursa of Fabricius that is an organ in birds in which avian B cells mature. The principal function of B cells is to make antibodies against soluble antigens. B cells are an essential component of the adaptive immune system.
<b>Synonyms:</b>	B-cell marker, B cells

**Product images:**

Immunohistochemical staining on rat spleen frozen sections using B Lymphocytes antibody clone Ki-B1R Cat.-No. BM4013.