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## **Monoclonal Antibody To Rat NKR-P1 Marker for Rat Natural Killer Cells (Klrb1; CD161)**

Monoclonal antibody 10-78 recognizes a 60kDa disulfide linked homodimer known as NKR-P1 or KLRB (Killer cell Lectin-like Receptor, subfamily B). This type II transmembrane glycoprotein of the C-type lectin superfamily is found on rat NK cells and large granular lymphocytes. Rat NKR-P1 comes in three highly related homologues (NKR-P1A, NKR-P1B and NKR-P1B\*), similar to the three homologues found in mice (KLRB1A/NKR-P1A, KLRB1B/NKR-P1B and KLRB1C/NKR-P1C) while only one human homologue (KLRB1, NKR-P1A or CD161) has been described. NKR-P1 seems to play an important role in the cytotoxic function of natural killer cells.

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<b>Product Number:</b>	T-3022 (Lot 01PO1004)
<b>Clone:</b>	10-78
<b>Host species, isotype:</b>	Mouse IgG1
<b>Quantity:</b>	200µg
<b>Format:</b>	Affinity purified, lyophilized  Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.09% sodium azide as a preservative.
<b>Stability:</b>	Original vial: 1 year at 4° - 8°C  Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
<b>Applications:</b>	Tested for immunohistochemistry (IHC); has been described to work in FACS.  <b>Approximate working dilution for IHC:</b> Frozen sections: 0.1µg/ml (1:4000) Paraffin sections: does not react on routinely processed paraffin sections. Optimal dilutions should be determined by the end user.  Suggested positive control: rat spleen.  Please see <a href="http://www.bma.ch">www.bma.ch</a> for protocols and general information.
<b>Immunogen:</b>	Purified splenic NK cells from the LEW rat strain.
<b>Antigen, epitope:</b>	The epitope has not been further characterized.

**Antigen distribution:** **Isolated Cells:** The antigen is described to be present on NK cells and large granular lymphocytes.  
**Tissue Sections:** The antigen is expressed on CD161 positive cells in various tissues, e.g. in rat spleen. There is a strong staining on cells in the red pulp, whereas there are only few cells with weak staining in the white pulp.

**Specificity:** **Rat:** NK cells and large granular lymphocytes  
**Other species:** not tested

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### Selected references

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- Chambers, W.H. et al.: Functional heterogeneity between NKR-P1<sup>bright</sup>/*Lycopersicon esculentum* lectin(L.E.)<sup>bright</sup> and NKR-P1<sup>bright</sup>/L.E.<sup>dim</sup> subpopulations of rat natural killer cells. *J. Immunol.* 148: 3658-65 (1992)

For *in vitro* research only. Caution: this product contains sodium azide, a poisonous and hazardous substance.