



## Peninsula Laboratories, LLC

A Member of the Bachem Group

305 Old County Road, San Carlos, CA 94070

Tel: (800) 922-1516 • (650) 592-5392

Fax: (650) 595-4071

www.bachem.com

---

### Monoclonal Antibody To Rat CD11b/c Macrophages / Microglial Cells (CR3)

Monoclonal antibody OX-42 recognises most macrophages (including resident peritoneal and activated macrophages), Kupffer cells, but only about 35% of alveolar macrophages. It also labels dendritic cells extensively, and granulocytes and cells with the morphology of microglia in the brain. OX-42 is probably the rat equivalent of the human CR3 complement receptor for iC3b. In combination with OX-41 it facilitates a more distinct phenotyping of resident macrophages.

---

<b>Product Number:</b>	T-3102
<b>Clone:</b>	OX-42
<b>Host species, isotype:</b>	Mouse IgG2a
<b>Quantity:</b>	1mg
<b>Format:</b>	Purified, liquid  Supplied as 1ml solution. This stock solution contains 1mg/ml IgG, phosphate buffered saline pH 7.2 (PBS) and 0.09% sodium azide as a preservative.
<b>Stability:</b>	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: 5 -10µg/ml (1:100 - 1:200) Paraffin sections: does not react on routinely processed paraffin sections.  Optimal dilutions should be determined by the end user.  Suggested positive control: Rat spleen.
<b>Immunogen:</b>	Peritoneal macrophages.
<b>Antigen, epitope:</b>	CD11b/c. OX-42 recognises three major polypeptides of 160kDa, 103kDa and 95kDa and a minor 133kDa protein under non-reducing conditions. Under reducing conditions two major peptides of 163kDa and 100kDa and a minor 135kDa peptide are detected.
<b>Antigen distribution:</b>	<b>Isolated cells:</b> OX-42 shows a similar reaction pattern to OX-41 on various isolated cells but stains bronchial lavage cells to a lesser degree. OX-42 inhibits complement mediated rosettes.  <b>Tissue sections:</b> OX-42 is a most suitable marker for the identification of microglial cells and Kupffer cells. It also stains



## Peninsula Laboratories, LLC

A Member of the Bachem Group

305 Old County Road, San Carlos, CA 94070

Tel: (800) 922-1516 • (650) 592-5392

Fax: (650) 595-4071

www.bachem.com

dendritic cells strongly. Only a subpopulation of alveolar macrophages is recognised.

**Specificity:**

**Rat:** granulocytes, macrophages, microglial cells.

**Other species:** not tested

### Distribution of OX-41 and OX-42 antigens on different cell types

Tissue	OX-41	OX-42
Spleen red pulp	+	+
Follicular tingible body macrophages	+	few
Interdigitating cells of spleen and lymph node	few	+
Kupffer cells	few	+
Glial cells of the brain	+	+
Langerhans cells of the skin	+	+

\*Microglia only

---

### Selected references

PERRY, H., Gordon, S.: Modulation of CD 4 Antigen on Macrophages and Microglia in Rat Brain. J. Exp. Med.: 166, 1138 - 1143 (1987).

ROBINSON, A.P., White, T.M., Mason, D.W.: Macrophage heterogeneity in the rat as delineated by two monoclonal antibodies MRC OX-41 and MRC OX-42, the latter recognizing complement receptor type 3. Immunology: 57, 239-247 (1986).

WHITHELAND, J.L. et al.: Immunohistochemical Detection of T-cell Subsets and Other Leukocytes in Paraffin-embedded Rat and Mouse Tissues with Monoclonal Antibodies. J. Histochem. Cytochem. 43: 313-320 (1995).

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