## CD68 Monoclonal Mouse Antibody (KP1)



## **Product Description**

This antibody recognizes a glycoprotein of 110 kDa, which is identified as CD68. It is important for identifying macrophages in tissue sections. It stains macrophages in a wide variety of human tissues, including Kupffer cells and macrophages in the red pulp of the spleen, in lamina propria of the gut, in lung alveoli, and in bone marrow. It reacts with myeloid precursors and peripheral blood granulocytes. It also reacts with plasmacytoid T cells, which are supposed to be of monocyte/macrophage origin. It shows strong granular cytoplasmic staining of chronic and acute myeloid leukemia and also reacts with rare cases of true histiocytic neoplasia. Lymphomas are negative or show few granules. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status**: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

## Product attributes

Antibody research areas Cell/tissue expression

Tumor expression

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| Product attributes                 |  |  |  |  |
|------------------------------------|--|--|--|--|
| Antibody number                    | #0512  |  |  |  |
| Antibody reactivity                | CD68   |  |  |  |
| (target)<br>Antibody type          | Primary  |  |  |  |
| Host species                       | Mouse  |  |  |  |
| Clonality                          | Monoclonal   |  |  |  |
| Clone                              | KP1  |  |  |  |
| Isotype                            | IgG1, kappa  |  |  |  |
| Molecular weight                   | ~110 kDa   |  |  |  |
| Synonyms                           | GP110, LAMP4, Microsialin,<br>Macrosialin, SCARD1, Scavenger<br>Receptor Class D Member-1  |  |  |  |
| Human gene symbol                  | CD68   |  |  |  |
| Entrez gene ID                     | 968  |  |  |  |
| SwissProt                          | P34810   |  |  |  |
| Unigene                            | 647419   |  |  |  |
| Immunogen                          | Subcellular fraction of human alveolar macrophages   |  |  |  |
| Antibody target cellular           | Plasma membrane  |  |  |  |
| Verified antibody                  | IHC (FFPE) (verified)  |  |  |  |
| applications<br>Species reactivity | Cat, Human, Monkey, Rabbit   |  |  |  |
| Antibody application notes         | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunolluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.25-0.5 ug/mL, Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/millior cells/0.1 mL, Does not react with pig, dog, or chicken; others not known, Optimal dilution for a specific application should be determined by user |  |  |  |
| Positive control                   | Tonsil, lymph node, or spleen  |  |  |  |
| Shipping condition                 | Room temperature   |  |  |  |
| Storage Conditions                 | Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  |  |  |  |
| Shelf life                         | Guaranteed for at least 24 months from date of receipt when stored as recommended  |  |  |  |
| Regulatory status                  | For research use only (RUO)  |  |  |  |
| Antibody/conjugate formulation     | Conjugates: 0.1 mg/mL in PBS/0.1%<br>BSA/0.05% azide, HRP conjugates: 0.1<br>mg/mL in PBS/0.05% BSA, Purified: 0.2<br>mg/mL in PBS/0.05% BSA/0.05% azide,<br>Purified, BSA-free: 1 mg/mL in PBS<br>without azide   |  |  |  |

Immunology

Monocytes/macrophages Leukemia/lymphoma

| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel           | Dye Features     |
|-------------------|-------------|------------|------------|-----------------------------|------------------|
| BNC04             | CF®405S     | 404/431    | 405        | DAPI (microscopy),<br>AF405 | CF®405S Features |
| BNC88             | CF®488A     | 490/515    | 488        | GFP, FITC                   | CF®488A Features |
| BNC68             | CF®568      | 562/583    | 532, 561   | RFP, TRITC                  | CF®568 Features  |
| BNC94             | CF®594      | 593/614    | 561        | Texas Red®                  | CF®594 Features  |
| BNC40             | CF®640R     | 642/662    | 633-640    | Cy®5                        | CF®640R Features |
| BNC47             | CF®647      | 650/665    | 633-640    | Cy®5                        | CF®647 Features  |
| BNCB              | Biotin      | N/A        | N/A        | N/A                         |                  |
| BNUB              | Purified    | N/A        | N/A        | N/A                         |                  |
| BNUM              | Purified,   | N/A        | N/A        | N/A                         |                  |

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