**Product datasheet**

**Anti-CD68 antibody [KP1] ab955**

★★★★★ 34 Abreviews  128 References  10 Images

**Overview**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-CD68 antibody [KP1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Mouse monoclonal [KP1] to CD68</td>
</tr>
<tr>
<td>Host species</td>
<td>Mouse</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: ICC/IF, IHC-FoFr, IHC-P, IHC-Fr</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Mouse, Rat, Rabbit, Human</td>
</tr>
<tr>
<td>Positive control</td>
<td>Tonsil</td>
</tr>
</tbody>
</table>

**Properties**

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.</td>
</tr>
</tbody>
</table>
| Storage buffer     | Preservative: 0.099% Sodium azide  
Constituents: 0.9% Proprietary component, 99% Water |
| Clonality          | Monoclonal                |
| Clone number       | KP1                       |
| Myeloma            | unknown                   |
| Isotype            | IgG1                      |
| Light chain type   | kappa                     |

**Applications**

Our Abpromise guarantee covers the use of ab955 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration. PubMed: 18804859</td>
</tr>
<tr>
<td>IHC-FoFr</td>
<td>★★★</td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>
Function
Could play a role in phagocytic activities of tissue macrophages, both in intracellular lysosomal metabolism and extracellular cell-cell and cell-pathogen interactions. Binds to tissue- and organ-specific lectins or selectins, allowing homing of macrophage subsets to particular sites. Rapid recirculation of CD68 from endosomes and lysosomes to the plasma membrane may allow macrophages to crawl over selectin-bearing substrates or other cells.

Tissue specificity
Highly expressed by blood monocytes and tissue macrophages. Also expressed in lymphocytes, fibroblasts and endothelial cells. Expressed in many tumor cell lines which could allow them to attach to selectins on vascular endothelium, facilitating their dissemination to secondary sites.

Sequence similarities
Belongs to the LAMP family.

Post-translational modifications
N- and O-glycosylated.

Cellular localization

Target

Images
ab955 staining CD68 in Human spleen tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 10% serum for 10 minutes at 20°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/200 in antibody dilution reagent) for 30 minutes at 20°C. An undiluted HRP-conjugated Rat anti-mouse/rabbit polymer was used as the secondary antibody.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD68 antibody [KP1] (ab955)
This image is courtesy of an anonymous Abreview

ab955 staining CD68 in Human ulcerated Oral (Mucosa/Bone) tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde, permeabilized with 0.1% Triton-X 100 in PBS and blocked with 2.5% serum for 90 minutes at 25°C; antigen retrieval was by heat mediation in citrate buffer (pH6). Samples were incubated with primary antibody (1/500 in 1% serum in PBS +0.01% Triton-X 100) for 16 hours at 4°C. A commercial IHC kit and DAB was used to visualize the staining.


Immunocytochemistry/ Immunofluorescence - Anti-CD68 antibody [KP1] (ab955)

ab955 staining CD68 in Human lung cancer tissues by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with formalin and blocked with 2% horse serum for 1 hour at room temperature. Samples were incubated with primary antibody (1/100) for 1 hour at 21°C. An Alexa Fluor® 488-conjugated Donkey anti-mouse IgG polyclonal (1/500) was used as the secondary antibody. DAPI containing mounting medium was used for nuclear staining (blue) and anti-TREM-1 (1/500) used for TREM-1 staining (red)
Immunohistochemical analysis of tonsil labelling CD68 with ab955.

ab955 at a 1/2000 dilution staining CD68 from mouse lung tissue sections (new born pups) by immunohistochemistry (frozen sections). The antibody was incubated with the tissue for 24 hours and then detected using an Alexa Fluor® 488 Goat anti-mouse IgG. The negative control was secondary antibody alone.

ab955 staining CD68 in Mouse brain tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and blocked with 5% horse serum for 30 minutes at 25°C; antigen retrieval was by heat mediation in a Tris buffer. Samples were incubated with primary antibody (1/100 in blocking buffer) for 15 hours at 4°C. An undiluted HRP-conjugated Horse polyclonal was used as the secondary antibody.
ab955 staining CD68 in Rabbit iliac tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/500 in Dako antibody diluent) for 4 hours at 25°C. An undiluted Beta-galactosidase-conjugated rabbit polyclonal was used as the secondary antibody.

Formalin-fixed, paraffin embedded sections of mouse spleen were stained for CD68 with ab at 1/200 dilution in immunohistochemical analysis. Alexa Fluor 647® conjugated Donkey Anti-Mouse was used as secondary antibody at 1/200 dilution.
Immunohistochemical analysis of tonsil labelling CD68 with ab955.

ab955 staining CD68 in human liver tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Tissue was fixed with paraformaldehyde. Samples were then blocked with 10% serum for 3 hours at 22°C followed by incubation with the primary antibody at a 1/100 dilution for 16 hours at 4°C. An Alexa-Fluor® 568 conjugated goat anti-mouse polyclonal was used as secondary antibody at a 1/400 dilution.

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