

## Product datasheet

# Anti-CD68 antibody [514H12] ab49777

[21 References](#)   [1 Image](#)

### Overview

<b>Product name</b>	Anti-CD68 antibody [514H12]
<b>Description</b>	Mouse monoclonal [514H12] to CD68
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> IHC-Fr, IHC-P <b>Unsuitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	fusion protein corresponding to the carboxy terminal half of the external domain of the human CD68 molecule.
<b>Positive control</b>	Tonsil
<b>General notes</b>	This antibody stains macrophages in various tissues including Kupffer's cells and in the red pulp of the spleen, lamina propria of the gut, lung alveoli and bone marrow. It reacts with myeloid precursors and peripheral blood granulocytes and monocytes.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.097% Sodium azide Constituent: Tissue culture supernatant
<b>Purity</b>	Tissue culture supernatant
<b>Primary antibody notes</b>	This antibody stains macrophages in various tissues including Kupffer's cells and in the red pulp of the spleen, lamina propria of the gut, lung alveoli and bone marrow. It reacts with myeloid precursors and peripheral blood granulocytes and monocytes.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	514H12
<b>Myeloma</b>	P3-NS1/1-Ag4-1
<b>Isotype</b>	IgG2a
<b>Light chain type</b>	kappa

## Applications

### The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab49777 in the following tested applications.

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

Application	Abreviews	Notes
IHC-Fr		1/40 - 1/80. Fix with acetone.
IHC-P		1/40 - 1/80. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. The use of EDTA buffer is recommended.

### Application notes

Is unsuitable for WB.

## Target

### 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.

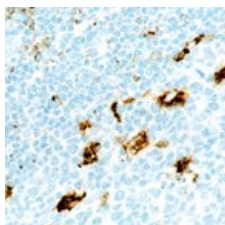
### Post-translational modifications

N- and O-glycosylated.

### Cellular localization

Cell membrane and Endosome membrane. Lysosome membrane.

## Images



This image shows human tonsil tissue stained with Ab 49777 at 1/40 dilution. Note intense cytoplasmic staining of macrophages.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD68 antibody [514H12] (ab49777)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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