abcam

Product datasheet

Anti-CD68 antibody [KP1] ab955

27 Abreviews 42 References 8 Images

Overview

Product name	Anti-CD68 antibody [KP1]
Description	Mouse monoclonal [KP1] to CD68
Tested applications	**Suitable for:** ICC/IF, IHC-FoFr, IHC-P, IHC-Fr
Species reactivity	**Reacts with:** Mouse, Rat, Rabbit, Human
Positive control	Tonsil

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.1% Sodium Azide Constituents: PBS, Carrier protein, Da Vinci Green diluent, pH 7.3
Purity	Immunogen affinity purified
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.

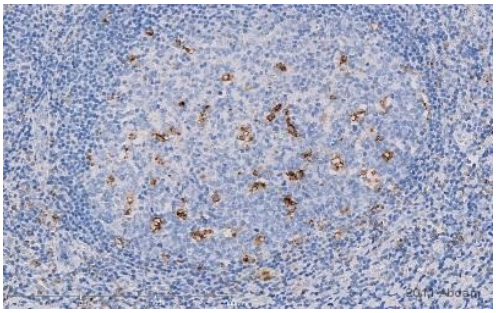
Application	Abreviews	Notes
ICC/IF	★★★★★	Use at an assay dependent concentration. PubMed: 18804859
IHC-FoFr	★★★★☆	Use at an assay dependent concentration.
IHC-P	★★★★★	1/200 - 1/400. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

		Recommended heat mediated antigen retrieval in pressure cooker for 2-5 minutes or steaming of tissue sections for 45-60 minutes followed by cooling for 10 minutes and washing in distilled water. In case of enzymatic epitope retrieval - digest with Pepsin enzyme for 30-60 seconds at RT.
IHC-Fr	★★★★★	1/200 - 1/400. Incubate for 30-60 minutes minimum at RT.

Target

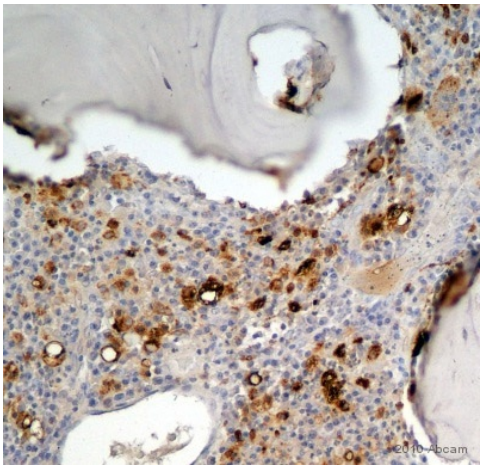
Function	Could play a role in phagocytic activities of tissue macrophages, both in intracellular lysosomal metabolism and extracellular cell-cell and cell-pathogen interactions. Binds to tissue- and organ-specific lectins or selectins, allowing homing of macrophage subsets to particular sites. Rapid 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.

Anti-CD68 antibody [KP1] images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD68 antibody [KP1] (ab955)
Image is courtesy of an anonymous AbReview

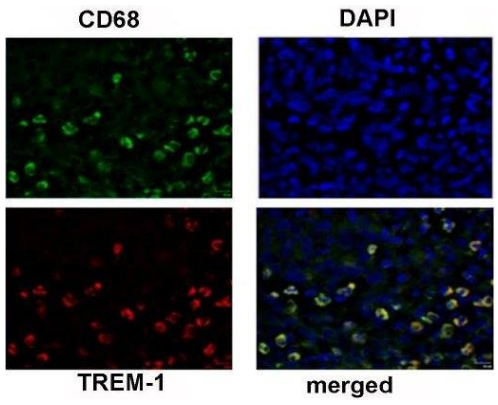
ab955 staining CD68 in Human spleen tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 10% serum for 10 minutes at 20°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/200 in antibody diution 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

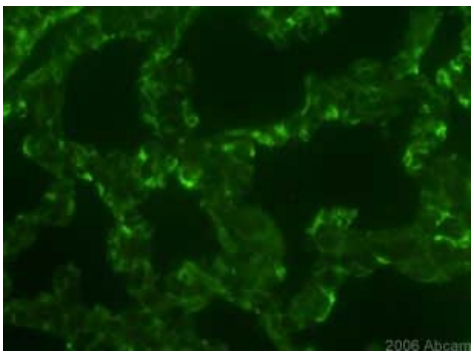
ab955 staining CD68 in Human ulcerated Oral (Mucosa/Bone) tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde, permeabilized with 0.1% Triton-X 100 in PBS and blocked with 2.5% serum for 90 minutes at 25°C; antigen 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)

Yuan Z et al., PLoS One 9:e94241 (2014)., doi: 10.1371/journal.pone.0094241

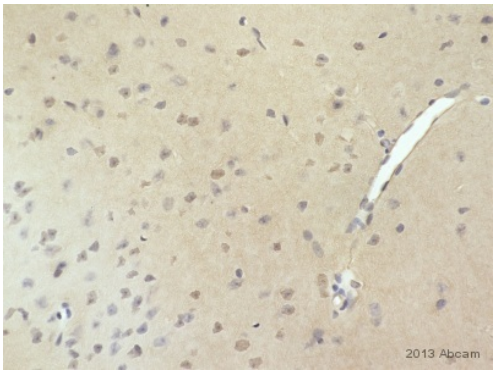
ab955 staining CD68 in Human lung cancer tissues by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with formalin and blocked with 2% horse serum for 1 hour at room temperature. Samples were incubated with primary antibody (1/100) for 1 hour at 21°C. An Alexa Fluor® 488-conjugated Donkey 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)



Immunohistochemistry (Frozen sections) - Anti-CD68 antibody [KP1] (ab955)

This image is courtesy of an anonymous Abreview

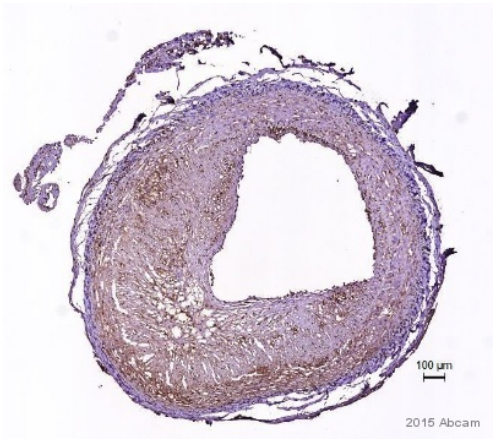
ab955 at a 1/2000 dilution staining CD68 from mouse lung tissue sections (new born pups) by immunohistochemistry (frozen sections). The antibody was incubated with the tissue for 24 hours and then detected using an Alexa-Fluor® 488 Goat anti-mouse IgG. The negative control was secondary antibody alone.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD68 antibody [KP1] (ab955)

Image is courtesy of an anonymous AbReview

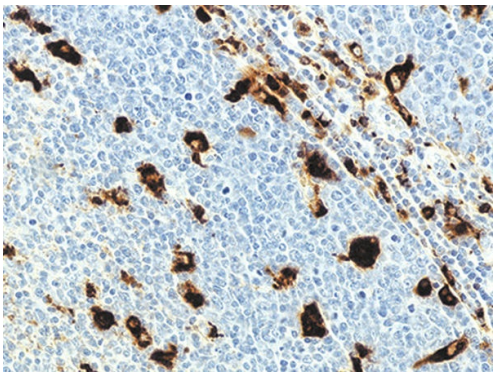
ab955 staining CD68 in Mouse brain tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and blocked with 5% horse serum for 30 minutes at 25°C; antigen retrieval was by heat mediation in a Tris buffer. Samples were 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD68 antibody [KP1] (ab955)

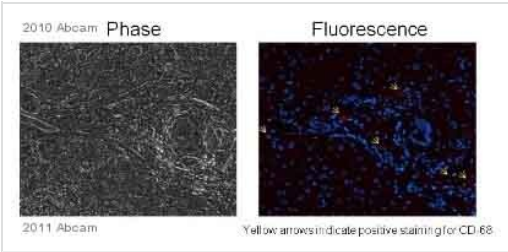
Image is courtesy of an anonymous AbReview

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.



Immunohistochemistry - Anti-CD68 antibody [KP1] (ab955)

Immunohistochemical analysis of tonsil labelling CD68 with ab955.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD68 antibody [KP1] (ab955)

Image courtesy of an anonymous Abreview.

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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