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antibody and ELISA experts

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Anti-Macrosialin CD68 Monoclonal Antibody

Catalog Number: M00602-2

About CD68

CD68, cluster of differentiation, is a 110-kD transmembrane glycoprotein that is highly expressed by human monocytes and tissue macrophages. CD68 is a member of a family of hematopoietic mucin-like molecules that includes leukosialin/CD43 and stem cell antigen CD34. The CD68 gene is mapped to 17p13.1. Immunohistochemistry can be used to identify the presence of CD68, which is found in the cytoplasmic granules of a range of different blood cells. It is particularly useful as a marker for the various cells of the macrophage lineage, including monocytes, histiocytes, giant cells, Kupffer cells, and osteoclasts. This allows it to be used to distinguish diseases of otherwise similar appearance, such as the monocyte/macrophage and lymphoid forms of leukaemia (the latter being CD68 negative). Its presence in macrophages also makes it useful in diagnosing conditions related to proliferation or abnormality of these cells, such as malignant histiocytosis, histiocytic lymphoma, and Gaucher's disease.

Overview

Product Name	Anti-Macrosialin CD68 Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Macrosialin CD68 Monoclonal Antibody catalog # M00602-2. Tested in IF, IHC-P applications. This antibody reacts with Human, Mouse, Rat.
Application	IF, IHC-P
Clonality	Monoclonal 6F3
Formulation	PBS, pH 7.4, containing 0.5% BSA, 0.02% sodium azide and 50% Glycerol.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P34810

Technical Details

Immunogen	Synthetic Peptide
Isotype	IgG
Form	Liquid
Concentration	1 mg/ml
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using a specific immunogen.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this

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	kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: IHC 1:200 IF 1:50-200

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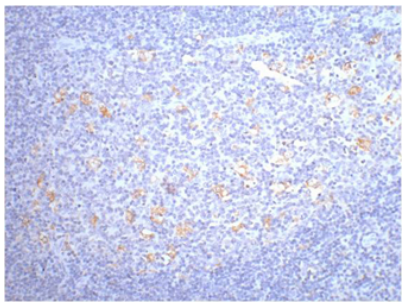
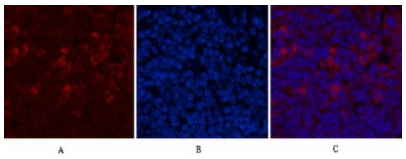
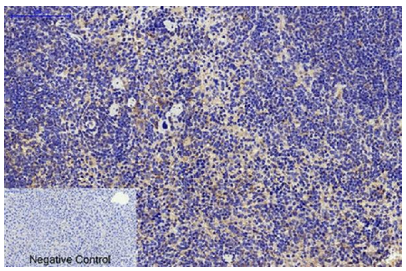
Anti-Macrosialin CD68 Monoclonal Antibody (M00602-2) Images



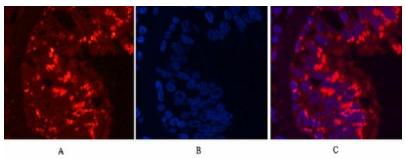
IHC staining of human tonsil tissue, diluted at 1:200.



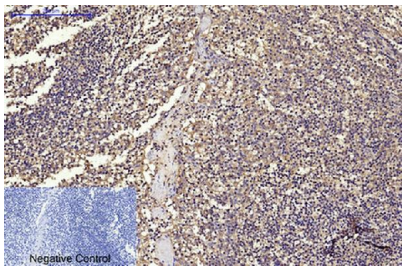
Immunofluorescence analysis of Mouse-spleen tissue. 1, CD68 monoclonal antibody (6F3) (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min).3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1, CD68 monoclonal antibody (6F3) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Human-lung-cancer tissue. 1, CD68 monoclonal antibody (6F3) (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min).3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-Tonsil tissue. 1, CD68 monoclonal antibody (6F3) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room tempeRature, 30min). Negative control was used by secondary antibody only.

20 Publications Citing This Product

1. PubMed ID: 34020949,

Myeloid-derived growth factor inhibits inflammation and alleviates endothelial injury and atherosclerosis in mice

Authors: Meng B,Li Y,Ding Y,Xu X,Wang L,Guo B,Zhu B,Zhang J,Xiang L,Dong J,Liu M,Xiang L,Xiang G.

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2. PubMed ID: -,

Tauroursodeoxycholic Acid Alleviates Secondary Injury in Spinal Cord Injury Mice Through Reducing Oxidative Stress

Authors: Yonghui Hou,Jiyao Luan,Tiancheng Deng et al.

3. PubMed ID: 33841657,

Schistosoma japonicum-derived peptide SJMHE1 promotes peripheral nerve repair through a macrophage-dependent mechanism

Authors: Ma Y,Wei C,Qi X,Pu Y,Dong L,Xu L,Zhou S,Zhu J,Chen X,Wang X,Su C

This study investigated whether helminths or helminth-derived molecules might have the potential to improve peripheral nerve repair. It was demonstrated that schistosome-derived SJMHE1 promoted peripheral myelin growth and functional regeneration via a macrophage-dependent mechanism and simultaneously increased the induction of M2 macrophages. The CD68 antibody from Bosterbio was used as the macrophage marker for this study. The findings indicated that schistosome-derived SJMHE1 enhances damaged peripheral nerve repair in a macrophage-dependent manner and concomitantly increases M2 macrophage polarization, highlighting the therapeutic potential of SJMHE1 for promoting peripheral nerve repair.

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