bsm-60634R **[Primary Antibody]**

CD68 Recombinant Rabbit mAb

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DATASHEET

Host: Rabbit
Isotype: IgG
Clonality: Recombinant
CloneNo.: 3G6
GeneID: 968
SWISS: P34810
Target: CD68
Purification: affinity purified by Protein A
Concentration: 1mg/ml
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: This gene encodes a 110-kD transmembrane glycoprotein that is highly expressed by human monocytes and tissue macrophages. It is a member of the lysosomal/endosomal-associated membrane glycoprotein (LAMP) family. The protein primarily localizes to lysosomes and endosomes with a smaller fraction circulating to the cell surface. It is a type I integral membrane protein with a heavily glycosylated extracellular domain and binds to tissue- and organ-specific lectins or selectins. The protein is also a member of the scavenger receptor family. Scavenger receptors typically function to clear cellular debris, promote phagocytosis, and mediate the recruitment and activation of macrophages. Alternative splicing results in multiple transcripts encoding different isoforms. [provided by RefSeq, Jul 2008]
CD68 (Macrosialin) is a 110 kDa integral membrane glycoprotein predominantly expressed on the intracellular lysomsomes of monocytes and macrophages and to a lesser extent by dendritic cells and peripheral blood granulocytes. Also, CD68 could play a role in phagocytic activities of tissue macrophages, both in intracellular lysosomal metabolism and extracellular cell-cell and cell-pathogen interactions. CD68 is expressed by interdigitating reticulum cells in tonsil and some histiocytic lymphoma or histiocytosis, acute myeloid leukemia (AML), and granulocytic sarcoma. Elevated expression of CD68 has been demonstrated on CD34+ cells in various human malignancies, including several Acute Myeloid Leukemia studies.

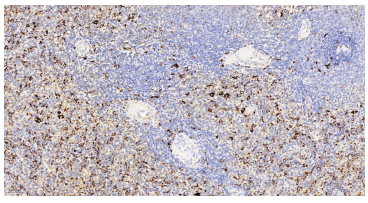
Applications: **IHC-P** (1:500-1000)
IHC-F (1:500-1000)
IF (1:500-1000)
Flow-Cyt (1ug/Test)

Reactivity: Human

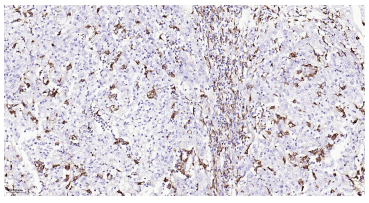
Predicted MW.: 37 kDa

Subcellular Location: Cell membrane ,Cytoplasm

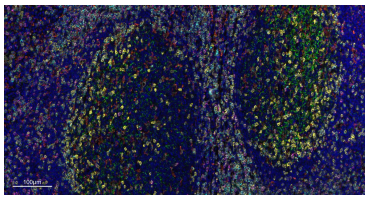
VALIDATION IMAGES



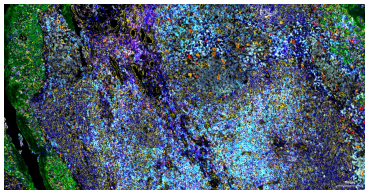
Paraformaldehyde-fixed, paraffin embedded Human Spleen; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with CD68 Monoclonal Antibody, Unconjugated (bsm-60634R) at 1:500 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



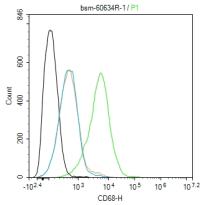
Paraformaldehyde-fixed, paraffin embedded (human endometrial carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD68) Monoclonal Antibody, Unconjugated (bsm-60634R) at 1:500 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded Human Tonsil. Merged staining of anti-CD8A (bsm-34251M; 1:200; pink) anti-CD4 (bsm-52469R; 1:200; light blue) anti-CD3E (bsm-60002R; 1:200; green) anti-CD68 (bsm-60634R; 1:200; white) anti-CD11c (bsm-61135R; 1:200; orange) and anti-CD20 (bsm-63327R; 1:200; yellow) DAPI (dark blue) was used as a nuclear counter stain.



Paraformaldehyde-fixed, paraffin embedded Human Tonsil. Merged staining of anti-CD68 (bsm-60634R; 1:200; red) anti- CD20 (bsm-63327R; 1:200; white) anti-CD3E (bsm-60002R; 1:200; light blue) anti-CD4 (bsm-52469R; 1:200; rose red) anti-Ki67 (bsm-52455R; 1:200; bean green) anti-Vimentin (bsm-33170M; 1:200; yellow) and anti-Pan Cytokeratin (bsm-34137M; 1:150; green) DAPI (dark blue) was used as a nuclear counter stain.



Blank control:THP-1. Primary Antibody (green line): Rabbit Anti-CD68 antibody (bsm-60634R) Dilution: 1ug/Test; Secondary Antibody (white blue line) : Goat anti-rabbit IgG-AF488 Dilution: 0.5ug/Test. Isotype control（orange line）： Normal Rabbit IgG Protocol The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=14.9]** Kanishka Fernando. et al. Extended human lymph node explants for evaluation of adaptive immunity. TRENDS BIOTECHNOL. 2025 Aug mIHC ;Human. 40885665
- **[IF=5.6]** Xiaoyue Guan. et al. The Role of Macrophage Efferocytosis in the Pathogenesis of Apical Periodontitis. INT J MOL SCI. 2024 Jan;25(7):3854 IHC,IF ;Human. 38612664