10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CD68 Rabbit pAb

CD68 Rabbit pAb
Catalog # AP52189

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P34810
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37408
Physical State	Liquid
Immunogen	Recombinant human CD68 protein
Epitope Specificity	22-319/354
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Isoform Short: Cell membrane; Single-pass type I membrane protein. Isoform Long: Endosome membrane; Single-pass type I membrane protein. Lysosome membrane; Single-pass type I membrane protein.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	968
Other Names	Macrosialin, Gp110, CD68, CD68
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CD68
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.
Cellular Location	[Isoform Short]: Cell membrane; Single-pass type I membrane protein
Tissue Location	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.

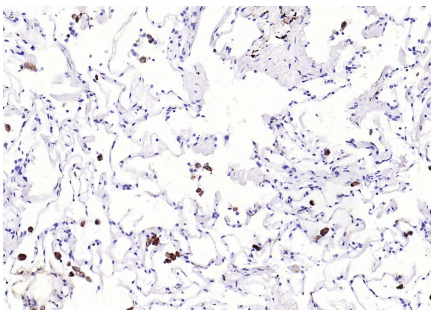
Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

References

Holness C.L.,et al.J. Biol. Chem. 268:9661-9666(1993).
Jiang Z.,et al.Genomics 50:199-205(1998).
Greaves D.R.,et al.Genomics 54:165-168(1998).
Li A.C.,et al.J. Biol. Chem. 273:5389-5399(1998).
Miyashita A.,et al.Gene 237:53-60(1999).

Images



Paraformaldehyde-fixed, paraffin embedded (human lung carcinoma); Antigen retrieval by microwaving in sodium citrate buffer (pH6.0) for 5min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD68) Polyclonal Antibody, Unconjugated (AP52189) at 1:500 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Citations

- Glaucocalyxin A improves survival in bleomycin-induced pulmonary fibrosis in mice.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.