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Rabbit Anti-CD68 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52189

Product Information

Application	IHC-P, IF, E
Primary Accession	P31996
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34818
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.
SIMILARITY	Belongs to the LAMP family.
Post-translational modifications	N- and O-glycosylated
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]

Additional Information

Gene ID	12514
Other Names	Lamp4; gp11; Scard1; Macrosialin; CD68
Target/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.
Dilution	IHC-P=1:100-500,IF=1:200-800,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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 Long]: Endosome membrane; Single-pass type I membrane protein. Lysosome membrane; Single-pass type I membrane protein
Tissue Location	Expressed in tissue macrophages and to a lesser extent in dendritic cells

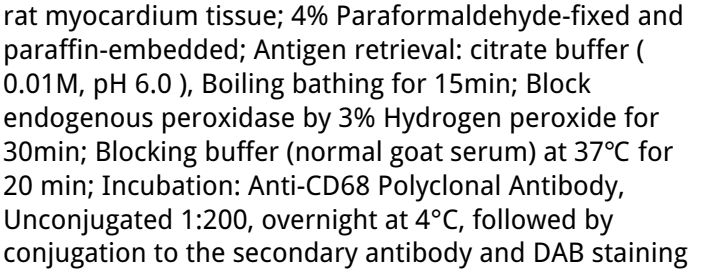
Background

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.

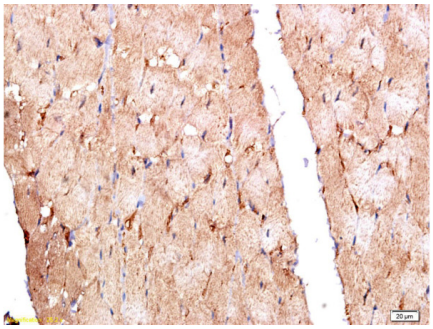
References

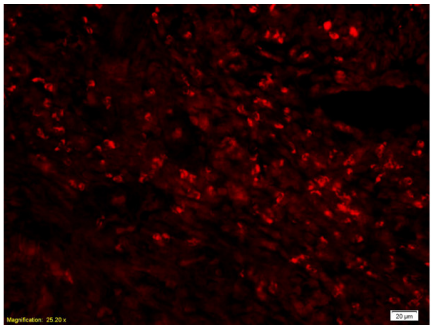
Holness C.L.,et al.J. Biol. Chem. 268:9661-9666(1993).
Jiang Z.,et al.Genomics 50:199-205(1998).
Greaves D.R.,et al.Genomics 54:165-168(1998).
Li A.C.,et al.J. Biol. Chem. 273:5389-5399(1998).
Miyashita A.,et al.Gene 237:53-60(1999).

Images

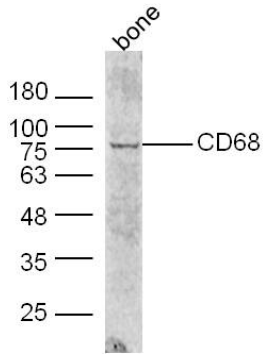


rat myocardium tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum) at 37℃ for 20 min; Incubation: Anti-CD68 Polyclonal Antibody, Unconjugated 1:200, overnight at 4°C, followed by conjugation to the secondary antibody and DAB staining





Formalin-fixed and rat colitis tissue labeled with Anti-CD68 Polyclonal Antibody, Unconjugated AP52189 at 1:200 followed by conjugation to the secondary antibody, Goat Anti-Rabbit IgG, Cy5 conjugated,



Western blot analysis of extracts from Bone tissue(mouse) using CD68 Antibody.

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'.