ARG10514
anti-CD68 antibody [KP1]

Package: 100 µg, 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [KP1] recognizes CD68
Tested Reactivity	Hu, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	KP1
Isotype	IgG1
Target Name	CD68
Immunogen	Lysosomal contents of lung macrophages.
Conjugation	Un-conjugated
Alternate Names	Macrosialin; CD antigen CD68; LAMP4; Gp110; GP110; SCARD1

Application Instructions

Application table

Application	Dilution
FACS	Assay-dependent
ICC/IF	Assay-dependent
IHC-P	Assay-dependent
WB	Assay-dependent

Application Note: IHC-P: Antigen Retrieval: Boil tissue section in Tris-EDTA pH9.0 or Citrate buffer (pH 6.0). Incubate with antibody at 4°C for overnight.
IHC-Fr: Incubate with the antibody at 4°C for overnight or at RT for 30-60 mins.
Flow cytometry: Membrane permeabilisation is required for this application.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: ~ 110 kDa

Properties

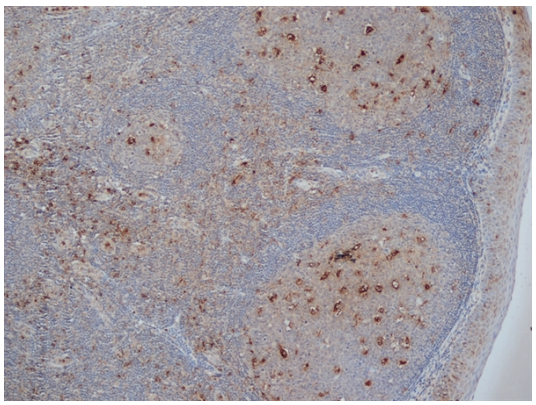
Form	Liquid
Purification	Purified by affinity chromatography.
Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

	freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

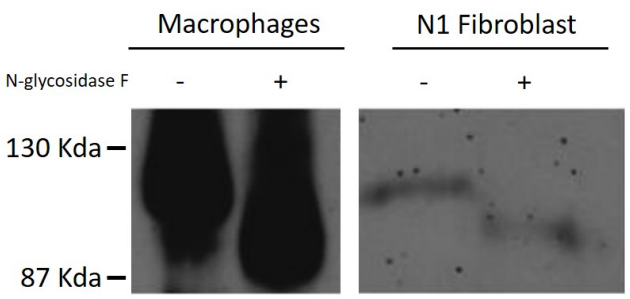
Database links	GeneID: 968 Human Swiss-port # P34810 Human
Gene Symbol	CD68
Gene Full Name	CD68 molecule
Background	CD68 is a 110-kD transmembrane glycoprotein that is highly expressed by human monocytes and tissue macrophages. It is a member of the lysosomal/endosomal-associated membrane glycoprotein (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]
Function	CD68 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. [UniProt]
Highlight	Related Antibody Duos and Panels: ARG30317 Activated Macrophage / Microglia Marker Antibody Duo ARG30324 Neuroinflammation Antibody Panel ARG30333 M1/M2/TAM Marker Antibody Panel Related products: CD68 antibodies; CD68 Duos / Panels; Anti-Mouse IgG secondary antibodies; Related news: Tumor-Infiltrating Lymphocytes (TILs) New antibody panels and duos for Tumor immune microenvironment Exploring Antiviral Immune Response Anti-SerpinB9 therapy, a new strategy for cancer therapy RIP1 activation and pathogenesis of NASH
Research Area	Immune System antibody; Activated Macrophage/Microglia Study antibody; Neuroinflammation Study antibody; Active macroglial Marker antibody; M1/M2/TAM Marker antibody; Macrophage Marker antibody; M1 macrophage Marker antibody; Inflammatory Cell Marker antibody
Calculated Mw	37 kDa
PTM	N- and O-glycosylated.

Images



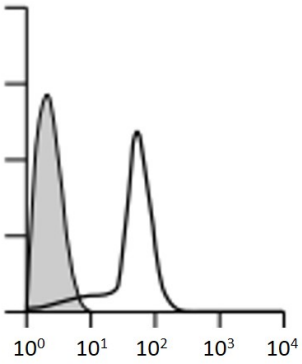
ARG10514 anti-CD68 antibody [KP1] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human tonsil stained with ARG10514 anti-CD68 antibody [KP1]. Antigen Retrieval: Boil tissue section in Citrate buffer (pH 6.0).



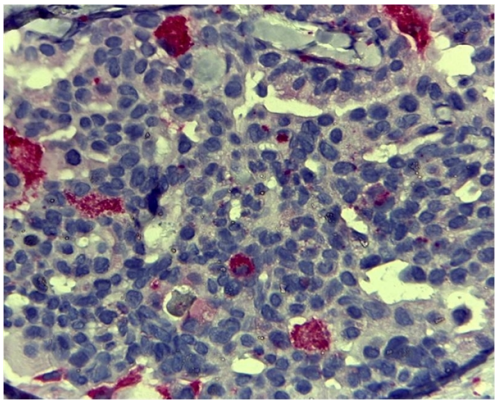
ARG10514 anti-CD68 antibody [KP1] WB image

Western blot: Human Macrophages and N1 Fibroblast untreated or treated with N-glycosidase F. The blots were stained with ARG10514 anti-CD68 antibody [KP1].



ARG10514 anti-CD68 antibody [KP1] FACS image

Flow Cytometry: THP1 cells prefixed with 4% PFA and then permeabilised with 0.25% saponin. Cells were stained with ARG10514 anti-CD68 antibody [KP1] (white area) or isotype control antibody (gray area).



ARG10514 anti-CD68 antibody [KP1] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human breast carcinoma stained with ARG10514 anti-CD68 antibody [KP1].