

Anti-CD68 [KP1]

Catalogue number: 151369

Sub-type: Primary antibody

Images:

Contributor

Inventor: Karen Pulford

Institute: University of Oxford

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-CD68 [KP1]

Alternate name: CD68 Molecule; CD68 Antigen; Macrophage Antigen CD68; GP11; Scavenger Receptor Class D; Member; Scavenger Receptor Class D; SCARD1; LAMP4

Class: Monoclonal

Conjugate: Unconjugated

Description: Monoclonal antibody which recognises most human macrophages, useful in studying macrophage disorders including both reactive and neoplastic states.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG1

Reactivity: Human

Selectivity:

Host: Mouse

Immunogen: Lysosomal contents of lung macrophages

Immunogen UNIPROT ID: P34810

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls: Human spleen tissue, Mouse brain tissue or human liver tissue (IHC); Human lung cancer (IF)

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: CD68

Target alternate names:

Target background: Anti-CD68 (KP1) monoclonal antibody recognises a fixation-resistant epitope in a wide variety of tissue macrophages (such as Kupffer cells germinal centre, splenic, and lamina propria macrophages), and in granulocyte precursors. Anti-CD68 (KP1) recognises most human macrophages in routinely processed tissue, where the target can be identified by immunocytochemical techniques. CD68 is a 110-kD transmembrane glycoprotein which is highly expressed by human monocytes and tissue macrophages. It is a member of the lysosomal/endosomal-associated membrane glycoprotein (LAMP) family and favours binding to lectins through its heavily glycosylated extracellular domain. CD68 is also a member of a family of hematopoietic mucin-like molecules that includes leukosialin/CD43 and stem cell antigen CD34. CD68 is resistant to conventional fixatives such as formalin and B5, as such KP1 may be of practical importance for diagnostic pathologists. CD68 persists throughout cell maturation from the monocyte to the mature macrophage stage. The quantity of this antigen increases upon macrophages when cells are activated and mature indicated by a greater intensity of staining. KP1 is widely used to detect macrophages in paraffin embedded tissue sections.

Molecular weight:

Ic50:

Applications

Application: FACS ; IHC ; IF ; IP ; WB

Application notes:

Handling

Format: Liquid

Concentration: 1 mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: PBS with 0.02% azide

Storage conditions:

Store at -20° C frozen. Avoid repeated freeze / thaw cycles

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Tooze et al. 1995. Exp Hematol. 23(14):1484-91. PMID: 8542935. ; The novel monoclonal antibody By114 helps detect the early emergence of a paroxysmal nocturnal hemoglobinuria clone in aplastic anemia. ; Mayne et al. 1993. Br J Haematol. 83(1):30-8. PMID: 8435334. ; Antibody By114 is selective for the 90 kD PI-linked component of the CD66 antigen: a new reagent for the study of paroxysmal nocturnal haemoglobinuria.

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