Datasheet for ABIN6658039

anti-CD68 antibody (Internal Region)

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Overview

Quantity:	100 µg
Target:	CD68
Binding Specificity:	Internal Region
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CD68 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (IHC), Fluorescence Microscopy (FM)

Product Details

Purpose:	Cd68 Antibody
Immunogen:	CD68 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of mouse CD68.
Isotype:	IgG
Cross-Reactivity (Details):	Anti-CD68 antibody is directed against mouse CD68 protein supplied in the buffer above with 4mg trehalose.
Purification:	The product was affinity purified from monospecific antiserum by immunoaffinity purification.

Target Details

Target:	CD68

Target Details

Alternative Name:	CD68 (CD68 Products)
Background:	Synonyms: Macrosialin, Gp110, CD68 Background: CD68, cluster of differentiation, is a 110-kD transmembrane glycoprotein that is highly expressed by human monocytes and tissue macrophages. CD68 is a member of a family of hematopoietic mucin-like molecules that includes leukosialin/CD43 and stem cell antigen CD34. The CD68 gene is mapped to 17p13.1. Immunohistochemistry can be used to identify the presence of CD68, which is found in the cytoplasmic granules of a range of different blood cells. It is particularly useful as a marker for the various cells of the macrophage lineage, including monocytes, histiocytes, giant cells, Kupffer cells, and osteoclasts. This allows it to be used to distinguish diseases of otherwise similar appearance, such as the monocyte/macrophage and lymphoid forms of leukaemia (the latter being CD68 negative). Its presence in macrophages also makes it useful in diagnosing conditions related to proliferation or abnormality of these cells, such as malignant histiocytosis, histiocytic lymphoma, and Gaucher's disease. This antibody is suitable for researchers interested in cancer research. Gene Name: CD68
UniProt:	P31996

Application Details

Application Notes:	Immunohistochemistry_Dilution: 0.5-1.0 µg/mL Flow_Cytometry_Dilution: 1-3 µg/1 million cells IF_Microscopy_Dilution: 5 µg/mL Western_Blot_Dilution: 0.1-0.5 µg/mL
Comment:	Suggested Applications: Other Anti-CD68 is tested for IHC-P, IHC-Fr, IF, Flow Cytometry, and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~34.8 kDa corresponding to the appropriate cell lysate or extract.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitution_Buffer: Restore with deionized water (or equivalent) Reconstitution_Volume: 200µL
Buffer:	Optional[Buffer]: 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide

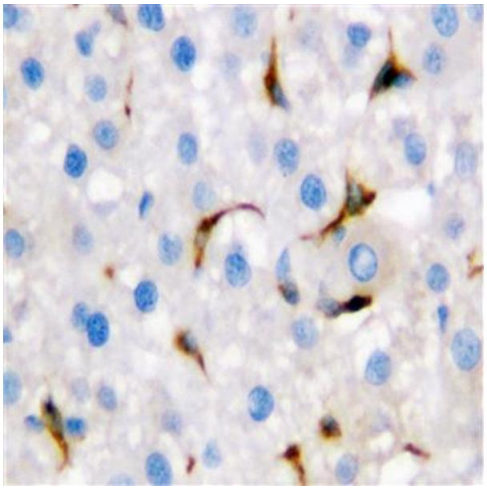
Handling

Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Publications

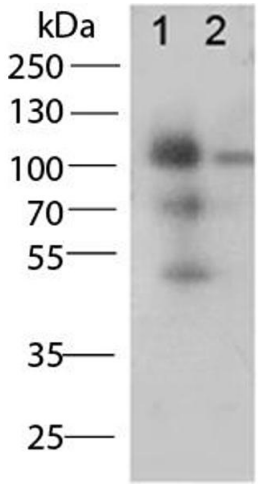
Product cited in:	Adrian, Weber, Tsai, Glock, Kahn, Phu, Cheung, Meilandt, Rose, Hoogenraad: "Polarized microtubule remodeling transforms the morphology of reactive microglia and drives cytokine release." in: **Nature communications**, Vol. 14, Issue 1, pp. 6322, (2023) (PubMed). Abuelezz, Hendawy, Magdy: "Targeting Oxidative Stress, Cytokines and Serotonin Interactions Via Indoleamine 2, 3 Dioxygenase by Coenzyme Q10: Role in Suppressing Depressive Like Behavior in Rats." in: **Journal of neuroimmune pharmacology : the official journal of the Society on NeuroImmune Pharmacology**, Vol. 12, Issue 2, pp. 277-291, (2018) (PubMed).

Images



Immunohistochemistry

Image 1. Immunohistochemistry of Rabbit anti-CD68 antibody. Immunohistochemistry of Rabbit anti-CD68 antibody. Tissue: rat liver tissue. Fixation: formalin fixed parraffin embedded. Primary antibody: CD68 antibody 10 µg/mL for 1 h at RT. Secondary antibody: Anti-rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: CD68 is an endosome and lysosome single-pass type I membrane protein. Staining: CD-68 as precipitated red signal with hematoxylin purple nuclear



counterstain.

Western Blotting

Image 2. Western Blot of Rabbit Anti-CD68 antibody. Western Blot of Rabbit Anti-CD68 antibody. Lane 1: Rat Spleen Tissue Lysate. Lane 2: Rat Lung Tissue Lysate. Load: 35 µg per lane. Primary antibody: CD68 antibody at 1 ug/ml for overnight at 4°C. Secondary antibody: rabbit secondary antibody at 1:10,000 for 1.5 hr at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~34 kDa/105kDa for CD-68.