

Product datasheet

Anti-CD64 antibody [EPR4623] ab109449

KO VALIDATED Recombinant RabMAb[®]

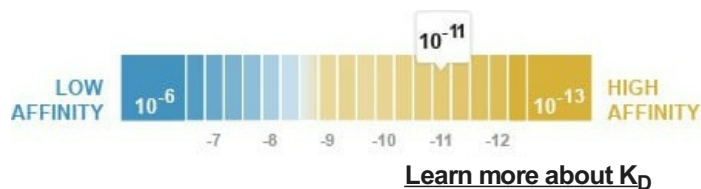
[2 References](#) [5 Images](#)

Overview

Product name	Anti-CD64 antibody [EPR4623]
Description	Rabbit monoclonal [EPR4623] to CD64
Host species	Rabbit
Tested applications	Suitable for: WB, Flow Cyt Unsuitable for: IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	U937, THP1, and HL60 cell lysates; U937 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 1.00 x 10 ⁻¹¹ M



Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4623
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109449 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

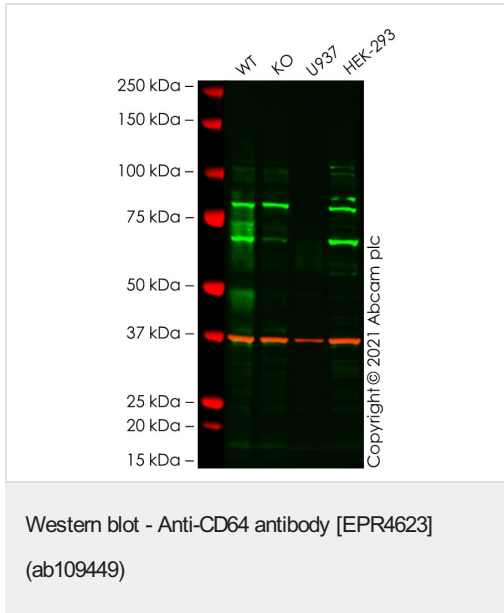
Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 64-78 kDa (predicted molecular weight: 43 kDa).
Flow Cyt		1/100 - 1/500. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Application notes Is unsuitable for IHC-P.

Target

Function	High affinity receptor for the Fc region of immunoglobulins gamma. Functions in both innate and adaptive immune responses.
Tissue specificity	Monocyte/macrophage specific.
Sequence similarities	Belongs to the immunoglobulin superfamily. FCGR1 family. Contains 3 Ig-like C2-type (immunoglobulin-like) domains.
Post-translational modifications	Phosphorylated on serine residues.
Cellular localization	Cell membrane. Stabilized at the cell membrane through interaction with FCER1G.

Images



All lanes : Anti-CD64 antibody [EPR4623] (ab109449) at 1/1000 dilution

Lane 1 : Wild-type THP-1 cell lysate

Lane 2 : FCGR1A knockout THP-1 cell lysate

Lane 3 : U937 cell lysate

Lane 4 : HEK-293 cell lysate

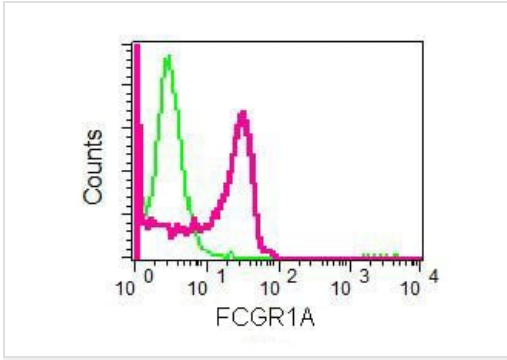
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 43 kDa

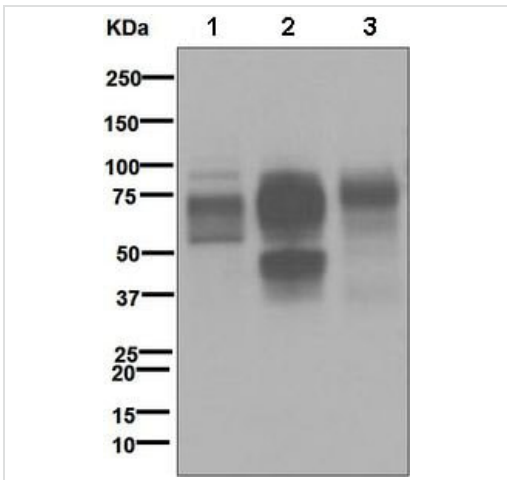
Observed band size: 45-50 kDa

False colour image of Western blot: Anti-CD64 antibody [EPR4623] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab109449 was shown to bind specifically to CD64. A band was observed at 45-50/55-80 kDa in wild-type THP-1 cell lysates with no signal observed at this size in FCGR1A knockout cell line [ab275843](#) (knockout cell lysate [ab275817](#)). To generate this image, wild-type and FCGR1A knockout THP-1 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Flow Cytometry - Anti-CD64 antibody [EPR4623] (ab109449)

ab109449 at 1/100 dilution staining CD64 in U937 cells by Flow cytometry (shown in red). Rabbit IgG negative control (shown in green).



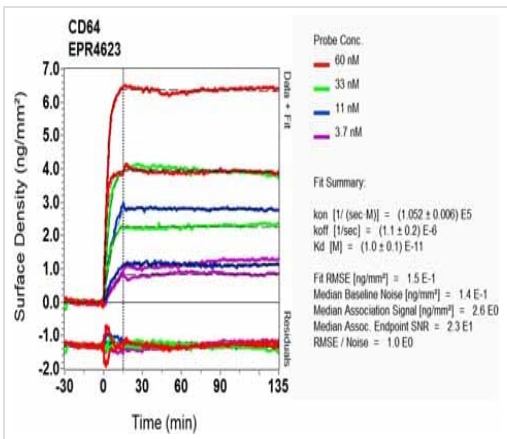
Western blot - Anti-CD64 antibody [EPR4623] (ab109449)

All lanes : Anti-CD64 antibody [EPR4623] (ab109449) at 1/1000 dilution

- Lane 1 :** U937 cell lysate
- Lane 2 :** THP1 cell lysate
- Lane 3 :** HL60 cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 43 kDa
Observed band size: 64-78 kDa







OI-RD Scanning - Anti-CD64 antibody [EPR4623] (ab109449)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-CD64 antibody [EPR4623] (ab109449)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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