

# CD64 Monoclonal Antibody (X54-5/7.1), PE, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	X54-5/7.1
Conjugate	PE
Excitation/Emission Max	565/576 nm
Immunogen	BALB/c mouse CD64-human IgG Fc fusion protein
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2735014

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	2 Publications

## Product Specific Information

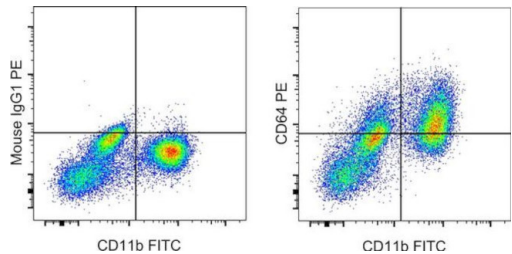
**Description:** This X54-5/7.1 monoclonal antibody recognizes allelic variants a and b of mouse CD64, a high affinity Fc binding receptor also known as Fc-gammaR1 or Fcgr1. Alloform a is present in the following mouse strains: C57BL/6, BALB/c, DBA/2, and alloform b in strains: C3H/HeJ, CBA/J, NZW, SJL/J, 129/SvJ. In addition this antibody has been reported positive in strains: AKR, ALR, BUB, C58, CE, HRS,MRL, MON, NZB, NZO, NZW, PL, SJL, ST and SWR. This clone X54-5/7.1 will not recognize the allelic variant d, present in NOD/Lt mice. This antibody has been reported to stain RAW264.7 cell line.

**Applications Reported:** This X54-5/7.1 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This X54-5/7.1 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This may be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

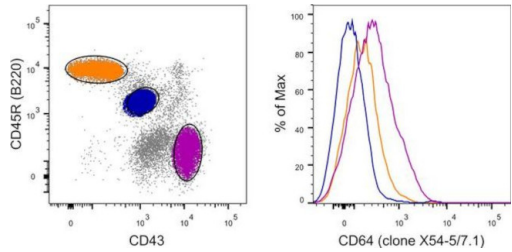
**Excitation:** 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser

Product Images For CD64 Monoclonal Antibody (X54-5/7.1), PE, eBioscience™



CD64 Antibody (12-0641-82) in Flow

BALB/c mouse bone marrow cells were Fc blocked with CD16/CD32 Antibody (Product # 14-0161-82) and normal mouse serum, and stained with CD11b Monoclonal Antibody, FITC (Product # 11-0112-82) and 0.25 µg of Mouse IgG1 kappa Isotype Control, PE (Product # 12-4714-82) (left) or 0.25 µg of CD64 Monoclonal Antibody, PE (right). All cells were used for analysis.



CD64 Antibody (12-0641-82)

Staining of mouse bone marrow. As expected based on the known relative expression patterns, CD64 clone X54-5/7.1 stains monocytes with the highest intensity (purple histogram) and B cell precursors with lower intensity (orange and blue histograms). Details: Mouse bone marrow was Fc blocked, stained with CD64 (clone X54-5/7.1), and co-stained with CD45R (B220) (clone RA3-6B2) and CD43 (clone eBioR2/60). Cells in the indicated color gates were used for analysis. {RE}

2 References

Flow Cytometry (2)

Science advances	
<b>Circulating hemopexin modulates anthracycline cardiac toxicity in patients and in mice.</b>	Year 2022
"Published figure using CD64 monoclonal antibody (Product # 12-0641-82) in Flow Cytometry"	
Authors: Liu J,Lane S,Lall R,Russo M,Farrell L,Debreli Coskun M,Curtin C,Araujo-Gutierrez R,Scherrer-Crosbie M,Trachtenberg BH,Kim J,Tolosano E,Ghigo A,Gerszten RE,Asnani A	
eLife	
<b>Inflammasome activation leads to cDC1-independent cross-priming of CD8 T cells by epithelial cell-derived antigen.</b>	Year 2021
"12-0641-82 was used in Flow cytometry/Cell sorting to investigate whether inflammasomes provide sufficient signals to activate adaptive immunity."	Species Mouse
Authors: Deets KA,Nichols Doyle R,Rauch I,Vance RE	Dilution 1:200

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.