

CD64 Monoclonal Antibody (X54-5/7.1), PerCP-eFluor™ 710, 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), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	X54-5/7.1
Conjugate	PerCP-eFluor™ 710
Excitation/Emission Max	482/708 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_2735016

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	5 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

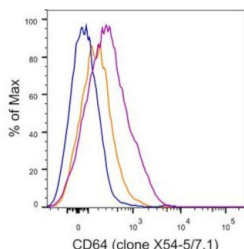
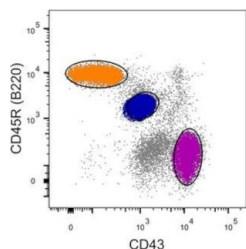
PerCP-eFluor™ 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

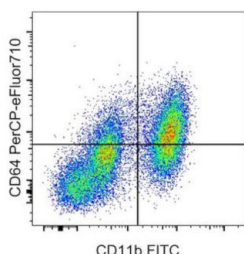
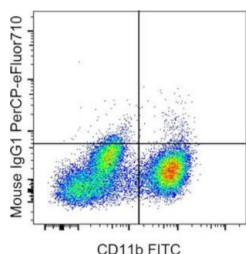
Excitation: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Product Images For CD64 Monoclonal Antibody (X54-5/7.1), PerCP-eFluor™ 710, eBioscience™



CD64 Antibody (46-0641-82)

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}



CD64 Antibody (46-0641-82) 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 μ g of Mouse IgG1 kappa Isotype Control, PerCP-eFluor 710 (Product # 46-4714-82) (left) or 0.25 μ g of CD64 Monoclonal Antibody, PerCP-eFluor 710 (right). All cells were used for analysis.

5 References

Flow Cytometry (5)

Nature

Neonatal imprinting of alveolar macrophages via neutrophil-derived 12-HETE.

"46-0641-82 was used in Flow cytometry/Cell sorting to highlight the complexity of prenatal RTM programming and reveal their dependency on in trans eicosanoid production by neutrophils for lifelong self-renewal."

Authors: Pernet E, Sun S, Sarden N, Gona S, Nguyen A, Khan N, Mawhinney M, Tran KA, Chronopoulos J, Amberkar D, Sadeghi M, Grant A, Wali S, Prevel R, Ding J, Martin JG, Thanabalasurari A, Yipp BG, Barreiro LB, Divangahi M

Year

2023

Species

Mouse

Science advances

Circulating hemopexin modulates anthracycline cardiac toxicity in patients and in mice.

"Published figure using CD64 monoclonal antibody (Product # 46-0641-82) 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

Year

2022

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More applications with references on thermofisher.cn

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