

CD64 Monoclonal Antibody (X54-5/7.1), APC-eFluor™ 780, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), APC-eFluor™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	X54-5/7.1
Conjugate	APC-eFluor™ 780
Excitation/Emission Max	756/785 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_2735012

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	1 Publication

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.

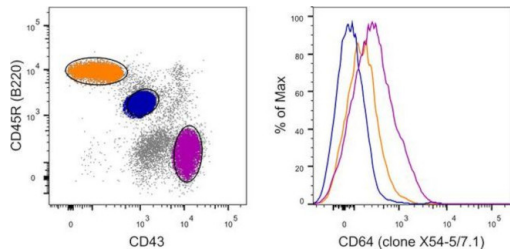
APC-eFluor™ 780 emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

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

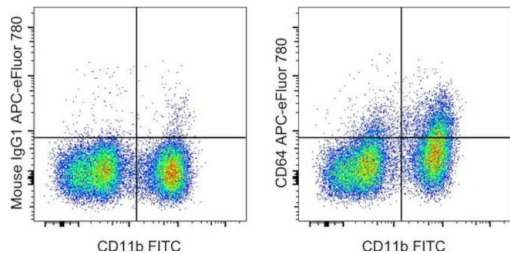
Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations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

Excitation: 633-647 nm; Emission: 780 nm; Laser: Red Laser

Product Images For CD64 Monoclonal Antibody (X54-5/7.1), APC-eFluor™ 780, eBioscience™



CD64 Antibody (47-0641-82)
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 (47-0641-82) 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, APC-eFluor 780 (Product # 47-4714-82) (left) or 0.25 µg of CD64 Monoclonal Antibody, APC-eFluor 780 (right). All cells were used for analysis.

1 Reference

Flow Cytometry (1)

Science advances	Year 2022
Circulating hemopexin modulates anthracycline cardiac toxicity in patients and in mice.	
"Published figure using CD64 monoclonal antibody (Product # 47-0641-82) 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	

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