Product Datasheet

F4/80 Antibody (CI:A3-1) - BSA Free
NBP2-61613

Unit Size: 0.2 mg

Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.

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Publications: 1

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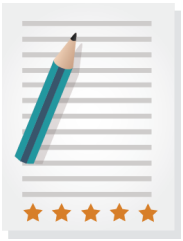
Updated 2/23/2025 v.20.1



NBP2-61613

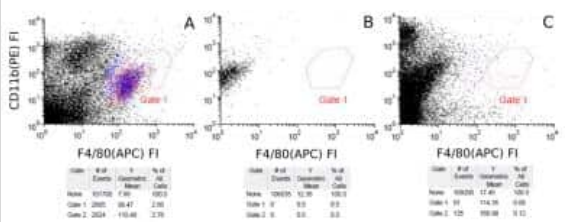
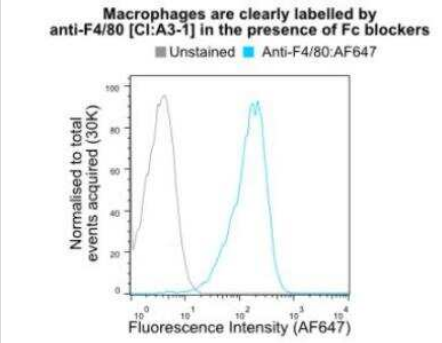
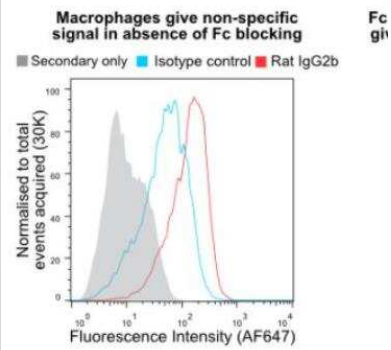
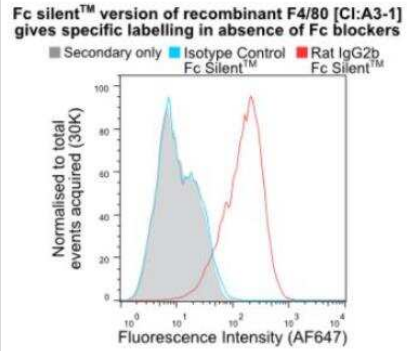
F4/80 Antibody (CI:A3-1) - BSA Free

Product Information	
Unit Size	0.2 mg
Concentration	1 mg/ml
Storage	Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.
Clonality	Monoclonal
Clone	CI:A3-1
Preservative	0.02% Proclin 300
Isotype	IgG1 Kappa
Purity	Protein A purified
Buffer	PBS
Target Molecular Weight	160 kDa

Product Description	
Description	Recombinant monoclonal antibody to F4/80. Manufactured using Recombinant Platform with variable regions (i.e. specificity) from the hybridoma CI:A3-1 (recombinant version).
Host	Rat
Gene ID	13733
Gene Symbol	Adgre1
Species	Mouse
Immunogen	This recombinant F4/80 Antibody (CI:A3-1) was developed against Thioglycollate stimulated peritoneal macrophages of mouse origin.

Product Application Details	
Applications	Flow Cytometry, Immunohistochemistry
Recommended Dilutions	Flow Cytometry 1:10-1:1000, Immunohistochemistry 1:10-1:500

Images

Flow Cytometry: F4/80 Antibody (CI:A3-1) [NBP2-61613] - Mouse (Mus musculus) splenocytes were labelled ex vivo with a commercially available APC-labelled anti-F4/80 antibody and APE labelled anti-CD11b antibody and subject to flow-cytometry analysis (A), in which a small subpopulation of F4/80-CD11b positive cells may be observed. Subsets of commerical anti-F4/80 antibody-labelled splenocytes were also subsequently incubated with unlabelled versions of either the rat (Rattus norvegicus) IgG2b chimeric version (B) or mouse IgG2A chimeric (C) version of CI:A3-1. Loss of the F4/80-CD11b positive subpopulation may be observed, demonstrating displacement of the commercial antibody and the specificity of CI:A3-1	
Flow Cytometry: F4/80 Antibody (CI:A3-1) [NBP2-61613] - Figure 1 murine bone marrow-derived macrophages (BMDMs) were pre-blocked with rat anti-mouse CD16 & CD32 (clone FCR-4G8) and stained with non-recombinant anti-F4/80 [CI:A3-1] conjugated to Alexa Fluor 647 (AF647), all commercially available from competitors.	 **Figure 1:** Flow-cytometric confirmation of presence of F4/80-antigen on bone marrow derived cells used in study.
Flow Cytometry: F4/80 Antibody (CI:A3-1) [NBP2-61613] - Figure 2 BMDMs were stained with recombinant anti-F4/80 [CI:A3-1] or isotype control (anti-fluorescein [4-4-20 (enhanced)] IgG2b. Whilst in Figure 2 the highest fluorescence signal is seen with the recombinant anti-F4/80 IgG2 (the isotype of the original hybridoma-derived antibody), the isotype control IgG2b shows considerable signal overlap, indicative of binding of the antibody to Fc-receptors. This illustrates the importance of isotype controls in such experiments when using conventional antibody formats particularly when Fc-blocking reagents are incompatible with the system used due to reactivity with the secondary antibody.	 **Figure 2:** Flow-cytometric analysis of BMDM staining using classic IgG2 isotype antibodies.
Flow Cytometry: F4/80 Antibody (CI:A3-1) [NBP2-61613] - Figure 3 BMDMs were stained with Fc Silent recombinant anti-F4/80 [CI:A3-1] or isotype control (Fc Silent anti-fluorescein [4-4-20 (enhanced)] IgG2b. These were fluorescently labelled using the secondary antibody, goat IgG anti-rat IgG (H&L-chain) polyclonal antibody directly conjugated to Alexa Fluor 647(AF647) commercially available from a competitor. The Fc silent format however overcomes this issue as seen in Figure 3, where the Fc silent recombinant anti-F4/80 yields a strong and distinct signal, whilst the isotype control shows no discernible difference to the background staining from the secondary antibody alone. Therefore, with Fc Silent reagents, no Fc-blocking products are required. [Data courtesy of Lewis Taylor.]	 **Figure 3:** Flow-cytometric analysis of BMDM staining using Fc Silent™ antibodies.

Publications

Batoon L, Millard Sm, Raggatt Lj Et Al. Osteal macrophages support osteoclast-mediated resorption and contribute to bone pathology in a postmenopausal osteoporosis mouse model Journal of bone and mineral research : the official journal of the American Society for Bone and Mineral Research 2021-07-19 [PMID: 34278602] (IF/IHC)

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F0105B	Goat anti-Rat IgG Secondary Antibody [Phycoerythrin]
NBP1-43322-0.5mg	Rat IgG1 Kappa Light Chain Isotype Control (RG1)
210-TA-005	TNF-alpha [Unconjugated]

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This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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