

Anti-Mouse CD16.2 (9E9) In Vivo Antibody- Low Endotoxin

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Product Benefits:

ichorbio's anti-Mouse CD16.2 In Vivo Antibody (9E9) - Low Endotoxin [ICH1194] is manufactured in a cGMP compliant, ISO Quality Standard 9001:2015 facility. ichorbio's low endotoxin antibodies have half the endotoxin of comparable antibodies from [Bio X Cell](#) at less than 1.0 EU/mg. If ichorbio's low endotoxin antibodies are not low enough we also offer ultra low endotoxin antibodies which have even less endotoxin (0.5EU/mg) at an even higher purity (98% versus 95%). ichorbio: the best antibodies for *in vivo* research.

Target:

CD16.2

Clone:

9E9

Size:

ichorbio's 9E9 *in vivo* antibody is available in the following bulk sizes: 5mg, 25mg, 50mg and 100mg. ichorbio regularly manufactures multi-gram amounts of our anti-mouse CD16.2 9E9 clone - please contact us for pricing.

Isotype:

Armenian Hamster IgG

Other Names:

Fc γ RIV

Host:

Armenian Hamster

Species Reactivity:

Mouse

Specificity:

9E9 activity is primarily directed against mouse CD16.2 / Fc γ RIV but can also bind and block Fc γ RIII *in vivo*.

Antigen Distribution:

Fc γ RIV is expressed on the cell membrane of splenic and bone marrow dendritic cells, monocytes, and macrophages as well as peripheral blood monocytes, neutrophils, thioglycollate-elicited macrophages, and myeloid cells. Fc γ RIV is absent from lymphoid populations, T cells, B cells, NK cells, and other granulocytes.

Background:

According to surface plasmon resonance, 9E9 has strong reactivity to Fc γ RIV as well as low level binding to Fc γ RII and Fc γ RIII. In vivo, 9E9 binds and blocks Fc γ RIII only when 9E9 first binds Fc γ RIV on the same effector cell, resulting in concurrent inhibition of Fc γ RIII and Fc γ RIV. Native 9E9 binds to Fc γ RII and Fc γ RIII via the Fc. Blocking studies with 9E9 show that Fc γ RIV is necessary for IgG2a and IgG2b mediated platelet clearance in vivo. Additionally, blocking Fc γ RIV with 9E9 reduces B-cell depletion. 9E9 also interferes with immune complex binding to Fc γ RIV and can block Fc γ RIII on macrophages and neutrophils.

Immunogen:

9E9 was produced by immunizing Armenian hamsters with an Fc γ RIV-IgG1 fusion protein consisting of the extracellular domain of Fc γ RIV fused to a mouse IgG1 Fc portion (D265A-variant deficient in Fc-receptor binding). Splenic B cells were then fused to a mouse fusion partner, and hybridoma clones were screened for binding to CHO-K1-Fc γ RIV cells expressing Fc γ RIV.

Concentration:

1.0 - 5.0 mg/ml

Formulation:

0.01 M phosphate buffered saline (PBS) pH 7.2, 150 mM NaCl with no carrier protein, potassium or preservatives added. BSA and Azide free.

Purity:

>95% by SDS-PAGE and HPLC

>98% by SDS-PAGE and HPLC

Endotoxin:

1.0 EU/mg as determined by the LAL method

? 0.75 EU/mg as determined by the LAL method

Aggregation:

Aggregation level ? 5%

Aggregation level ? 1%

IMPACT Pathogen Test:

We use the IMPACT test generated by IDEXX Laboratories to guarantee our Ultra Low Endotoxin antibodies are pathogen free. Our mouse antibodies are tested for: Mycoplasma spp., Mycoplasma pulmonis, Sendai virus, Mouse hepatitis virus, Pneumonia virus of mice, Minute virus of mice, Mouse parvovirus (MPV1-5), Theiler's murine encephalomyelitis virus, Murine norovirus, Reovirus 3, Mouse rotavirus, Ectromelia virus, Lymphocytic choriomeningitis virus, Polyoma virus, Lactate dehydrogenase-elevating virus, Mouse adenovirus (MAD1, MAD2), Mouse cytomegalovirus K virus, Mouse thymic virus, Hantaan virus, Corynebacterium bovis, Corynebacterium spp. (HAC2)

Storage:

Anti-Mouse CD16.2 In Vivo Antibody (9E9) is stable for at least one week when stored sterile at 2-8°C. For long term storage aseptically aliquot in working volumes without diluting and store at -20°C in a manual defrost freezer. Avoid Repeated Freeze Thaw Cycles.

Applications:

Blocking, Flow Cytometry

Application Notes: Each investigator should determine their own optimal working dilution for specific applications. **Use:**

Products are for research use only.

Isotype Control:

[Armenian Hamster IgG Isotype Control for In Vivo - Low Endotoxin \[PIP\] \(ICH2251\)](#)