# ichorbio

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

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

#### **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 <u>Bio X Cell</u> 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?RIV

#### Host:

Armenian Hamster

#### **Species Reactivity:**

Mouse

#### Specificity:

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

#### **Antigen Distribution:**

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

#### Immunogen:

9E9 was produced by immunizing Armenian hamsters with an Fc?RIV-IgG1 fusion protein consisting of the extracellular domain of Fc?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?RIV cells expressing Fc?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:**

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### ichorbio

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  $-20^{\circ}$ 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:** 

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#### **Isotype Control:**

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

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