

Anti-Mouse MHC Class II (M5/114.15.2) In Vivo Antibody - Low Endotoxin

Product Code: ICH1176

Bulk anti-MHC Class II In Vivo Antibody - Low Endotoxin (M5/114.15.2)

Product Benefits:

ichorbio's anti-MHC Class II In Vivo Antibody - Low Endotoxin (M5/114.15.2) 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:

MHC Class II

Other Names:

I-A/I-E MHC class II

Clone:

M5/114.15.2

Size:

ichorbio's M5/114.15.2 *in vivo* antibody is available in the following bulk sizes: 1mg, 5mg, 25mg, 50mg and 100mg. ichorbio regularly manufactures multi-gram amounts of our anti-MHC Class II In Vivo Antibody - Low Endotoxin (M5/114.15.2) - please [contact us](#) for bulk pricing.

Isotype:

Rat IgG2b

Host:

Rat

Species Reactivity:

Mouse

Specificity:

Clone M5/114.15.2 recognizes an epitope on the mouse MHC class II molecules I-Ab, I-Ad, I-Aq, I-Ed, and I-Ek. Clone M5/114.15.2 does not react with I-Af, I-Ak, or I-As.

Purification Method:

This monoclonal antibody was purified using multi-step affinity chromatography methods such as Protein A or G depending on the species and isotype.

Antigen Distribution:

I-Ab/d/q and I-Ed/k are expressed on antigen-presenting cells, including macrophages, monocytes, DCs, and B cells, and activated T cells from mice of the I-Ab/d/q and I-Ed/k haplotypes.

Background:

Anti-MHC Class II In Vivo Antibody - Low Endotoxin (M5/114.15.2), recognizes the major histocompatibility complex (MHC) class II molecules I-Ab, I-Ad, I-Aq, I-Ed, and I-Ek. MHC class II is constitutively expressed on professional antigen-presenting cells (APCs), including macrophages/monocytes, dendritic cells (DCs), and B cells, and is induced on T cells upon activation. MHC class II consists of two transmembrane proteins, a 35 kDa α (heavy) chain and 29 kDa β (light) chain. The N-terminal $\alpha 1$ and $\beta 1$ domains form the antigen-binding groove, which binds 13-25 aa peptides derived from exogenous antigens. On APCs, MHC class II plays a critical role in the adaptive immune response by presenting phagocytosed antigens to helper CD4 T cells. The T cell receptor (TCR)/CD3 complex of CD4 T cells interacts with peptide-MHC class II, which induces CD4 T cell activation leading to the coordination and regulation of other effector cells. CD4 molecules also bind to MHC class II, which helps augment TCR signaling. It has also been demonstrated that MHC class II express on activated T cells are capable of antigen presentation and can transduce signals into T cells, enhancing T cell proliferation and activity.

Immunogen:

C57BL/6 Spleen Cells.

Concentration:

>2.0 mg/ml

Formulation:

This M5/114.15.2 *in vivo* antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (PBS) pH 7.2 - 7.4, 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 $\leq 5\%$

Aggregation level $\leq 1\%$

IMPACT Pathogen Test:

We use the IMPACT test generated by IDEXX Laboratories to guarantee our Ultra Low Endotoxin antibodies are pathogen free. Our rat antibodies are tested for: Mycoplasma spp. Mycoplasma pulmonis Sendai virus Pneumonia virus of mice Rat Minute virus Rat parvovirus Lymphocytic choriomeningitis virus Rat cytomegalovirus Rat coronavirus Sialodacryoadenitis virus Seoul virus Mouse adenovirus Reovirus 3 Rat teilorvirus

Storage:

This antibody is stable for at least 4 weeks when stored at 2-8°C. For long term storage, aliquot in working volumes without diluting and store at - 20°C or -80°C. Avoid repeated freeze thaw cycles.

Applications:

IHC (Frozen), Flow Cytometry, Immunoprecipitation, Blocking, CODEX®

Application Notes:

Each investigator should determine their own optimal working dilution for specific applications.

Use:

Products are for research use only.

Alternative Names:

- D6S221E antibody
- DMA antibody
- DMB antibody
- DP beta 1 antibody
- DP beta 1 chain antibody
- DP(W4) beta chain antibody
- DPB 1 antibody
- DPB1 antibody
- DRB antibody
- H2Ea antibody
- HLA class II histocompatibility antigen antibody
- HLA class II histocompatibility antigen DM beta chain antibody
- HLA class II histocompatibility antigen, DP beta 1 chain antibody
- HLA class II histocompatibility antigen, DP(W4) beta chain antibody
- HLA DMB antibody
- HLA DP1A antibody
- HLA DPB1 antibody
- HLA SB alpha chain antibody
- HLA-A antibody
- HLA-A histocompatibility type antibody

- HLA-DP antibody
- HLA-DP histocompatibility type, beta-1 subunit antibody
- HLA-DP1B antibody
- HLA-DPB antibody
- HLA-DPB1 antibody
- HLADM antibody
- HLADP1B antibody
- HLASB antibody
- HLASB histocompatibility type antibody
- LA class II histocompatibility antigen DP alpha 1 chain antibody
- Major histocompatibility complex class II antibody
- Major histocompatibility complex class II DP alpha 1 antibody
- Major histocompatibility complex class II DP beta 1 antibody
- Major histocompatibility complex, class I, A antibody
- MHC class II antigen DMB antibody
- MHC class II antigen DPB1 antibody
- MHC class II DP3 alpha antibody
- MHC class II DPA1 antibody
- MHC class II HLA-DP-beta-1 antibody
- MHC DPB1 antibody
- MHC HLA DPB1 antibody
- PLT1 antibody
- Primed lymphocyte test 1 antibody
- RING6 antibody
- RING7 antibody