Anti-Mouse IFNAR1 (MAR1-5A3) In Vivo Antibody - Low Endotoxin

Bulk anti-IFNAR1 In Vivo Antibody - Low Endotoxin (MAR1-5A3)

Bio X Cell:

ICH1122 is up to 37% cheaper for industry customers than the equivalent product from Bio X Cell (BE0241). ICH1122UL (ultra-low endotoxin) is up to 36% cheaper for industry than the same format from Bio X Cell (BP0241). **Product Benefits:**

ichorbio's anti-IFNAR1 In Vivo Antibody - Low Endotoxin (MAR1-5A3) is manufactured in a cGMP compliant 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.

Size:

ichorbio's MAR1-5A3 *in vivo* antibody is available in the following sizes: 1mg, 5mg, 25mg, 50mg and 100mg ichorbio regularly manufactures bulk multi-gram amounts of our anti-IFNAR1 MAR1-5A3 clone - please contact us for pricing.

Target:

IFNAR1

Clone:

MAR1-5A3

Isotype:

Mouse IgG1

Other Names:

Interferon alpha/beta receptor 1, IFN-R-1, IFN-alpha/beta receptor 1, Type I interferon receptor 1, Ifar, Ifnar

Uniprot:

P33896

Host:

Mouse

Species Reactivity:

Mouse

Specificity:

Anti-IFNAR1 In Vivo Antibody - Low Endotoxin (MAR1-5A3) recognizes the extracellular domain of the IFNAR1 subunit of the mouse IFN-alpha / beta receptor.

Antigen Distribution:

IFNAR1 and IFNAR2 are coexpressed on nearly all cells.

Background:

The antibody when prepared specifically for *in vivo* functional assays blocks type I IFN receptor signaling both *in vitro* and *in vivo* without depleting IFNAR1 bearing cells. This antibody was produced by *in vivo* genetic immunization of IFNAR1 knockout mice with a plasmid encoding the extracellular domain of murine IFNAR1. IFNAR1 and IFNAR2 are coexpressed on nearly all cells and make up the heterodimeric receptor that binds all type I IFNs (IFN alpha and beta). Type I IFNs are a family of cytokines that have been shown to promote anti-viral, anti-microbial, anti-tumor and autoimmune responses *in vivo*.

Immunogen:

This antibody was produced by *in vivo* genetic immunization of IFNAR1 knockout mice with a plasmid encoding the extracellular domain of murine IFNAR1.

Concentration:

? 2.0 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:

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:

Immunoprecipitation, Western Blot, Blocking, Functional Assays, Flow Cytometry, ELISA

How much MAR1-5A3 to use *in vivo*:

Blocking: Clone MAR1-5A3 has a short half-life, basically because every cell expresses the IFNAR1 receptor and the receptor recycles very rapidly. And, if you want to block function *in vivo*, you need to be sure that all of the receptors are blocked continually in all compartments. Therefore, you need a large *in vivo* loading dose (2.5 mg/mouse) to saturate all the binding sites *in vivo* and then maintain a high enough level to keep them saturated. For *in vivo* blocking studies we recommend give a loading dose of 2.5 mg/mouse and follow with a weekly dose of 0.5 mg/mouse. The half-life following a 2.5 mg loading dose is about 5 days. [However, if you only inject a low dose of 250 micrograms, then the half life is 1.5 days – because you haven't saturated the mouse]. Each investigator should determine their own optimal working dilution for specific applications.

Use:

Products are for research use only.

Isotype Control:

Mouse IgG1 Isotype Control for In Vivo - Low Endotoxin [HKSP] (ICH2247)