Leinco Technologies, Inc.
excellence in early discovery research™

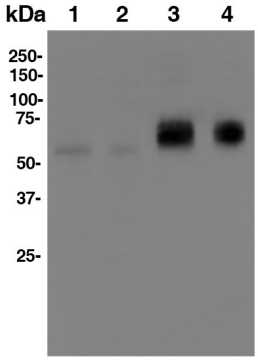
Mouse IFNAR-1 Antibody

Purified *in vivo* GOLD™ Functional Grade

Monoclonal Antibody

Product Information

Product No.:	I-401
Clone:	MAR1-5A3
RRID:	AB_2491621
Isotype:	Mouse IgG1
Storage:	Sterile 2-8°C



Lane 1: 20 ug reduced A-20 whole cell lysate (Prod. No. A232)

Lane 2: 10 ug reduced A-20 whole cell lysate (Prod. No. A232)

Lane 3: 1 ug reduced recombinant mouse IFNAR-1

Lane 4: 0.5 ug reduced recombinant mouse IFNAR-1

Primary: anti-mouse IFNAR-1antibody (MAR1-5A3) at 8 ug/ml (Prod. No. I-401)

Secondary: HRP labeled goat anti-mouse at 1:1000 dilution (Prod. No. M114)

Predicted band size: 60-70 kDa

Product Description

Specificity:
Clone MAR1-5A3 recognizes an epitope on mouse IFNAR1.

Antigen Distribution:
IFNAR1 and IFNAR2 are coexpressed on nearly all cells.

Background:
IFNAR1 is a type I membrane protein, that in conjunction with IFNAR2, makes up the heterodimeric receptor that binds all type I IFNs, which includes IFN α and β. Binding and activation of the receptor stimulates Janus protein kinases, which leads to the phosphorylation of several other proteins, namely STAT1 and STAT2. IFNAR1 has also been shown to interact with PRMT1 and Tyrosine kinase 2. 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*.

Known Reactivity Species:
Mouse

Format:
in vivo GOLD™, Purified in vivo Functional Grade

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

Formulation

This monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.

Purity

≥95% monomer by analytical SEC, >95% by SDS Page

Endotoxin

< 1.0 EU/mg as determined by the LAL method

Storage and Stability

Functional grade preclinical antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at ≤ -70°C.
Avoid Repeated Freeze Thaw Cycles.

Product Preparation

Functional grade preclinical antibodies are manufactured in an animal free facility using *in vitro* cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.

Applications

Applications and Recommended Usage (Quality Tested By Leinco):

FC The suggested concentration for clone MAR1-5A3 antibody for staining cells in flow cytometry is ≤ 2.0 µg per 10^6 cells in a volume of 100 µl or 100µl of whole blood. Titration of the reagent is recommended for optimal performance for each application. NOTE: Leinco Technologies suggests using Anti-Mouse IFNAR1-Biotin (With Streptavidin - PE; Part No. S211) (Leinco Product No.: I-402) for flow cytometry of mouse cells

Other Applications Reported in Literature:

B Clone MAR1-5A3 has a short half-life due to the rapid recycling of cells that express the IFNAR1 receptor. In order to block function *In vivo*, continual blocking of all compartments is necessary. Therefore, a large loading dose is necessary to saturate all *In vivo* binding sites and should be maintained to ensure binding site saturation. For *In vivo* blocking studies, a loading dose of 2.5 mg/mouse, followed by a weekly dose of 0.5 mg/mouse is recommended. The half-life following a 2.5 mg loading dose is approximately 5 days. However, if you fail to saturate the binding sites by injecting a low dose of 250 µg, for example, the half life is only 1.5 days.
WB For Western blotting, the suggested use of this reagent is 1.0 µg per ml (See Data Results) IP
ELISA

Country of Origin

USA

References

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