

## APC anti-mouse IFN- $\gamma$ R $\beta$ chain Antibody

<b>Catalog# / Size</b>	113605 / 25 $\mu$ g 113606 / 100 $\mu$ g
<b>Clone</b>	MOB-47
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	IFN- $\gamma$ Receptor $\beta$ chain, IFN- $\gamma$ AF-1
<b>Isotype</b>	Armenian Hamster IgG
<b>Description</b>	IFN- $\gamma$ receptor $\beta$ chain is also known as IFN- $\gamma$ AF-1. This 60-65 kD class II cytokine receptor pairs with CDw119 to form the IFN- $\gamma$ receptor. CDw119 serves as the IFN- $\gamma$ -binding chain and associates with the IFN- $\gamma$ $\beta$ chain which is required for receptor signaling. The extracellular portion of both the IFN- $\gamma$ receptor $\alpha$ and $\beta$ chains must be species matched. The IFN- $\gamma$ receptor $\beta$ chain is expressed at low levels on T and B cells, NK cells, monocytes/ macrophages, and fibroblasts. Binding of IFN- $\gamma$ induces receptor dimerization, internalization, Jak1 and Jak2 protein kinase activation and, ultimately, STAT1 activation. IFN- $\gamma$ initiates and regulates a variety of immune responses.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Armenian Hamster
<b>Immunogen</b>	Mouse IFN- $\gamma$ R $\beta$ chain protein
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions.
<b>Concentration</b>	0.2 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is $\leq$ 1.0 $\mu$ g per million cells in 100 $\mu$ l volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: Western blotting <sup>1</sup> and immunoprecipitation <sup>1</sup> . For the most successful immunofluorescent staining results, it may be necessary to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 113604) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated anti-Armenian hamster IgG (Cat. No. 405501) second step, followed by SAV-PE (Cat. No. 405204)).
<b>Application References</b>	1. Bach EA, <i>et al.</i> 1995. <i>Science</i> 270:1215.
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	1. Xiao Y, <i>et al.</i> 2022. <i>Nat Commun.</i> 13:758. <a href="#">PubMed</a>
<b>RRID</b>	AB_2734170 (BioLegend Cat. No. 113605) AB_2783052 (BioLegend Cat. No. 113606)

## Antigen Details

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<b>Structure</b>	Class II cytokine receptor family, associates with CDw119, 60-65 kD, AF-1
<b>Distribution</b>	T and B cells, NK cells, monocytes, macrophages, granulocytes, fibroblasts
<b>Function</b>	Regulates immune response, upregulates MHC class I expression
<b>Ligand/Receptor</b>	IFN- $\gamma$
<b>Cell Type</b>	B cells, Fibroblasts, Granulocytes, Macrophages, Monocytes, NK cells, T cells
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	CD Molecules, Cytokine/Chemokine Receptors
<b>Antigen References</b>	1. Bach EA, <i>et al.</i> 1995. <i>Science</i> 270:1215. 2. Ansel KM, <i>et al.</i> 2003. <i>Nat. Immunol.</i> 4:616.
<b>Gene ID</b>	<a href="#">15978</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

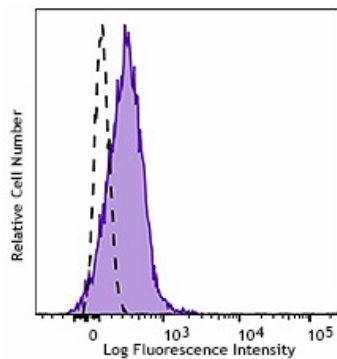
## Other Formats

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PE anti-mouse IFN- $\gamma$ R  $\beta$  chain, APC anti-mouse IFN- $\gamma$  R  $\beta$  chain

## Product Data

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Murine lymphoma cell line A20 was stained with IFN- $\gamma$ R  $\beta$  chain (clone MOB-47) APC (filled histogram) or Armenian Hamster IgG APC isotype control (open histogram).

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