

## APC anti-human CD218a (IL-18R $\alpha$ ) Antibody

<b>Catalog# / Size</b>	313813 / 25 tests 313814 / 100 tests
<b>Clone</b>	H44
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	HCDM listed
<b>Other Names</b>	IL-18 receptor alpha chain, IL-18 receptor 1, IL-18 receptor related protein, CDw218a
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	IL-18 receptor is composed of an $\alpha$ and a $\beta$ subunit that combine to form a high affinity receptor for IL-18. IL-18 receptor $\alpha$ chain, also known as CDw218a, is a 75-80 kD type I transmembrane protein. It is expressed on NK cells, neutrophils, endothelial cells, and subsets of T and B cells. The expression of CDw218a on lymphocytes is upregulated after activation. The interaction of IL-18 and IL-18 receptor has been reported to be implicated in promotion of Th1 cytokine production and atherogenesis.

### Product Details

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<b>Verified Reactivity</b>	Human, Cynomolgus, Rhesus
<b>Reported Reactivity</b>	African Green, Baboon
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human NK cell line NK0 constitutively expressing IL-18 receptors
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<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 5 $\mu$ l per million cells in 100 $\mu$ l staining volume or 5 $\mu$ l per 100 $\mu$ l of whole blood.
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	The H44 antibody is specific for IL-18 receptor $\alpha$ chain. Additional reported applications (for the relevant formats) include: immunohistochemistry of acetone-fixed frozen sections and neutralization <sup>1</sup> .
<b>Application References</b> (PubMed link indicates BioLegend citation)	1. Kitasato Y, <i>et al.</i> 2004. <i>Am. J. Respir. Cell Mol. Biol.</i> 31:619. (IHC) 2. Vermot-Desroches C, <i>et al.</i> 2005. <i>Cell Immunol.</i> 236:101. (FC)
<b>Product Citations</b>	1. Hackstein CP, <i>et al.</i> 2022. <i>Nat Commun.</i> 13:7472. <a href="#">PubMed</a>
<b>RRID</b>	AB_2800828 (BioLegend Cat. No. 313813) AB_2800829 (BioLegend Cat. No. 313814)

## Antigen Details

<b>Structure</b>	Type I membrane protein, IL-1 receptor family, approximately 75-80 kD
<b>Distribution</b>	Expressed on NK cells and neutrophils, IL-12 activated T and B cells, endothelial cells, and smooth muscle cells; highly expressed on Hodgkin's disease cell lines
<b>Function</b>	Binds IL-18 with low affinity; high affinity binding site formed with IL-18R $\beta$
<b>Ligand/Receptor</b>	IL-18
<b>Cell Type</b>	B cells, Endothelial cells, Neutrophils, NK cells, T cells
<b>Biology Area</b>	Immunology, Innate Immunity
<b>Molecular Family</b>	CD Molecules, Cytokine/Chemokine Receptors
<b>Antigen References</b>	1. Torigoe K, <i>et al.</i> 1997. <i>J. Biol. Chem.</i> 272:25737. 2. Gerdes N, <i>et al.</i> 2002. <i>J. Exp. Med.</i> 195:245. 3. Airoidi I, <i>et al.</i> 2000. <i>J. Immunol.</i> 165:6880.
<b>Gene ID</b>	<a href="#">8809</a>

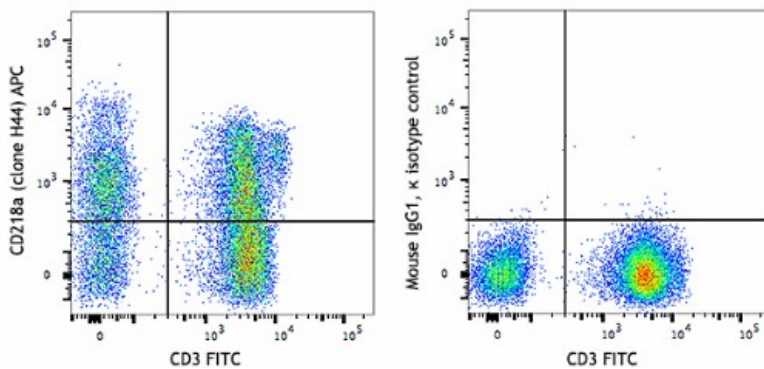
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-human CD218a (IL-18R $\alpha$ ), Biotin anti-human CD218a (IL-18R $\alpha$ ), PE anti-human CD218a (IL-18R $\alpha$ ), FITC anti-human CD218a (IL-18R $\alpha$ ), PE/Cyanine7 anti-human CD218a (IL-18R $\alpha$ ), APC anti-human CD218a (IL-18R $\alpha$ ), TotalSeq™-A0862 anti-human CD218a (IL-18R $\alpha$ ), TotalSeq™-C0862 anti-human CD218a (IL-18R $\alpha$ )

## Product Data



Human peripheral blood lymphocytes were stained with CD3 FITC and anti-human CD218a (clone H44) APC (left) or Mouse IgG1,  $\kappa$  APC isotype control (right)

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