

PE anti-human CD218a (IL-18R α) Antibody

Catalog# / Size	313808 / 100 tests
Clone	H44
Regulatory Status	RUO
Workshop	HCDM listed
Other Names	IL-18 receptor alpha chain, IL-18 receptor 1, IL-18 receptor related protein, CDw218a
Isotype	Mouse IgG1, κ
Description	IL-18 receptor is composed of an α and a β subunit that combine to form a high affinity receptor for IL-18. IL-18 receptor α 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

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	African Green, Baboon
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human NK cell line NK0 constitutively expressing IL-18 receptors
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	The H44 antibody is specific for IL-18 receptor α chain. Additional reported applications (for the relevant formats) include: immunohistochemistry of acetone-fixed frozen sections and neutralization ¹ .
Application References (PubMed link indicates BioLegend citation)	<ol style="list-style-type: none"> 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)
Product Citations	<ol style="list-style-type: none"> 1. Spallanzani R, <i>et al.</i> 2015. <i>J Immunol.</i> 195: 2141-2148. PubMed 2. Huang Y, <i>et al.</i> 2020. <i>FASEB J.</i> 34:1768. PubMed 3. Hofbauer D, <i>et al.</i> 2021. <i>Immunity.</i> 54(8):1772-1787.e9. PubMed 4. Halkias J, <i>et al.</i> 2019. <i>J Clin Invest.</i> 130:3562. PubMed

Antigen Details

Structure	Type I membrane protein, IL-1 receptor family, approximately 75-80 kD
Distribution	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
Function	Binds IL-18 with low affinity; high affinity binding site formed with IL-18R β
Ligand/Receptor	IL-18
Cell Type	B cells, Endothelial cells, Neutrophils, NK cells, T cells
Biology Area	Immunology, Innate Immunity
Molecular Family	CD Molecules, Cytokine/Chemokine Receptors
Antigen References	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.
Gene ID	8809

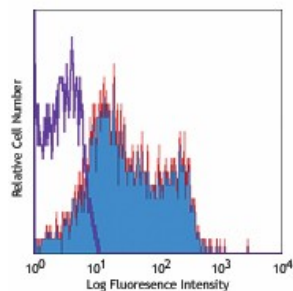
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

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

Product Data



Human peripheral blood lymphocytes stained with H44 PE

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