

## PE anti-human IL-16 Antibody

<b>Catalog# / Size</b>	519106 / 100 tests
<b>Clone</b>	14.1
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Interleukin-16
<b>Isotype</b>	Mouse IgG2a
<b>Description</b>	Interleukin-16 is a proinflammatory cytokine synthesized as a 68 kD precursor molecule (pro-IL-16). After cleavage of pro-IL-16 by caspase-3, IL-16 is released as a 12 kD protein, but its biologic activities are exerted by a tetramer. IL-16 is a chemoattractant for CD4 <sup>+</sup> T cells, monocytes, and eosinophils. On T cells, IL-16 upregulates CD25 and class II expression, and also inhibits HIV-1 replication <i>in vitro</i> by repressing the transcription of the HIV-1 long terminal repeat. IL-16 is expressed by lymphocytes, macrophages, eosinophils, mast cells, epithelial cells, and fibroblasts. CD4 and CD9 are the receptors of IL-16.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Peptide corresponding to amino acids 615 to 630 (RRKSLQSKETTAAGDS) of IL-16
<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 PE 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="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">intracellular immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: ELISA <sup>2</sup> , inhibition of T cell chemotaxis <sup>2</sup> and immunohistochemical staining of frozen lymph node sections <sup>3</sup> .
<b>Application References</b> (PubMed link indicates BioLegend citation)	<ol style="list-style-type: none"> <li>1. Cruikshank WW, <i>et al.</i> 1994. <i>P. Natl Acad Sci USA</i> 91:5109. (ICFC)</li> <li>2. Keane J, <i>et al.</i> 1998. <i>J. Immunol.</i> 160:5945. (Block, ELISA)</li> <li>3. Chupp GL, <i>et al.</i> 1998. <i>J. Immunol.</i> 161:3114. (Block, IHC)</li> <li>4. Stoitner P, <i>et al.</i> 2001. <i>J. Invest. Dermatol.</i> 116:641. (ICFC)</li> <li>5. Ren F, <i>et al.</i> 2005. <i>J. Immunol.</i> 174:2738. (ICFC)</li> </ol>
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>1. Noman M, <i>et al.</i> 2015. <i>Cancer Res.</i> 75: 3771-3787. <a href="#">PubMed</a></li> </ol>
<b>RRID</b>	AB_10897940 (BioLegend Cat. No. 519106)

## Antigen Details

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<b>Structure</b>	12 kD protein with a PDZ domain, product of the cleavage of pro-IL-16 by caspase-3, forms tetramers.
<b>Distribution</b>	Lymphocytes, macrophages, eosinophils, mast cells, epithelial cells, and fibroblasts.
<b>Function</b>	Chemoattractant for CD4 <sup>+</sup> T cells, monocytes, and eosinophils. Upregulates CD25 and class II expression on T cells. Inhibits HIV-1 replication.
<b>Ligand/Receptor</b>	CD4.
<b>Cell Type</b>	Eosinophils, Epithelial cells, Fibroblasts, Lymphocytes, Macrophages, Mast cells, Tregs
<b>Biology Area</b>	Immunology, Innate Immunity
<b>Molecular Family</b>	Cytokines/Chemokines
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Bellon M, <i>et al.</i> 2010. <i>Blood</i> 115:2441.</li><li>2. Rofani C, <i>et al.</i> 2009. <i>Stem Cells Dev.</i> 18:671.</li><li>3. Cruikshank W and Little F. 2008. <i>Crit. Rev. Immunol.</i> 28:467.</li><li>4. Gu Y, <i>et al.</i> 2008. <i>J. Immunol.</i> 181:4418.</li><li>5. McFadden C, <i>et al.</i> 2007. <i>J. Immunol.</i> 179:6439.</li><li>6. Qi JC, <i>et al.</i> 2006. <i>Blood</i> 107:135.</li></ol>
<b>Gene ID</b>	<a href="#">3603</a>

## Related Protocols

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[Intracellular Cytokine Staining Protocol - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

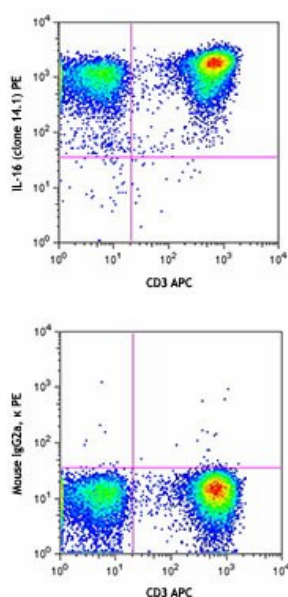
## Other Formats

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PE anti-human IL-16, Purified anti-human IL-16, Ultra-LEAF™ Purified anti-human IL-16

## Product Data

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Human peripheral blood lymphocytes were surface stained with CD3 APC, and then fixed, permeabilized, and stained with IL-16 (clone 14.1) PE (top) or mouse IgG2a, κ PE (bottom).

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