

Purified anti-human IL-16 Antibody

Catalog# / Size	519102 / 100 µg
Clone	14.1
Regulatory Status	RUO
Other Names	Interleukin-16
Isotype	Mouse IgG2a
Description	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 ⁺ 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

Verified Reactivity	Human
Reported Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Peptide corresponding to amino acids 615 to 630 (RRKSLQSKETTAAGDS) of IL-16
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	ICFC - Quality tested ELISA, IHC-F, Block - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤ 0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported applications (for the relevant formats) include: ELISA ² , inhibition of T cell chemotaxis ² and immunohistochemical staining of frozen lymph node sections ³ .
Application References	<ol style="list-style-type: none">1. Cruikshank WW, <i>et al.</i> 1994. <i>P. Natl Acad Sci USA</i> 91:5109. (ICFC)2. Keane J, <i>et al.</i> 1998. <i>J. Immunol.</i> 160:5945. (Block, ELISA)3. Chupp GL, <i>et al.</i> 1998. <i>J. Immunol.</i> 161:3114. (Block, IHC)4. Stoitzner P, <i>et al.</i> 2001. <i>J. Invest. Dermatol.</i> 116:641. (ICFC)5. Ren F, <i>et al.</i> 2005. <i>J. Immunol.</i> 174:2738. (ICFC)
Product Citations	<ol style="list-style-type: none">1. Noman M, <i>et al.</i> 2015. <i>Cancer Res.</i> 75: 3771-3787. PubMed
RRID	AB_11204433 (BioLegend Cat. No. 519102)

Antigen Details

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

Related Protocols

[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

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

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587