

Biotin anti-mouse IL-3 Antibody

Catalog# / Size	504002 / 500 µg
Clone	MP2-43D11
Regulatory Status	RUO
Other Names	Interleukin-3, Burst promoting activity, Eosinophil colony stimulating factor (Eo-CSF), Hematopoietic cell growth factor (HCGF), Mast (MGF/MCGF), Multi-colony stimulating (Multi-CSF), P cell stimulating activity (PCSA), Thy1 inducing factor
Isotype	Rat IgG2a, κ
Description	IL-3 is a highly species-specific pleiotropic factor produced primarily by activated T cells though also by mast cells keratinocytes, and astrocytes, which stimulates colony formation of megakaryocytes, neutrophils, and macrophages from bone marrow cultures. The MP2-43D11 antibody reacts with mouse interleukin-3 (IL-3). The MP2-43D11 antibody can not neutralize the bioactivity of natural or recombinant IL-3.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	COS-expressed, recombinant mouse IL-3
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. Do not freeze.
Application	ELISA Detection , ELISPOT Detection
Recommended Usage	Each lot of this antibody is quality control tested by ELISA assay . For use as an ELISA detection antibody, a concentration range of 0.5-2.0 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of IL-3 recombinant protein ranging from 250 to 2 pg/ml are recommended for each ELISA plate. For use as an ELISPOT detection antibody, a concentration range of 1-4 µg/ml is recommended. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes

ELISA or ELISPOT Detection^{1-5,7}: The biotinylated MP2-43D11 antibody is useful as a detection antibody for a sandwich ELISA or ELISPOT assay, when used in conjunction with purified MP2-8F8 antibody (Cat. No. 503902/503906) as the capture antibody.

Additional reported applications (for the relevant formats) include: immunoprecipitation¹, Western blotting, and immunohistochemical staining⁶ of paraformaldehyde-fixed, saponin-treated tissue sections.

Application References

(PubMed link indicates BioLegend citation)

1. Abrams, J., *et al.* 1992. *Immunol. Rev.* 127:5.
2. Abrams, J., *et al.* 1988. *J. Immunol.* 140:131.
3. Cockayne, D., *et al.* 1991. *Growth Factors* 5:171.
4. Sander, B., *et al.* 1993. *J. Immunol. Meth.* 166:201.
5. Abrams, J. 1995. *Curr. Prot. Immunol.* John Wiley and Sons, New York. Unit 6.20.
6. Sander, B., *et al.* 1991. *Immunol. Rev.* 119:65.
7. Karulin, A., *et al.* 2000. *J. Immunol.* 164:1862.

RRID AB_2123875 (BioLegend Cat. No. 504002)

Antigen Details

Structure	Cytokine; 28 kD (Mammalian)
Bioactivity	Proliferation/differentiation of almost all types of hematopoietic progenitors into granulocytes, macrophages, erythroid cells, megakaryocytes, mast cell colonies; induces expression of 20- α -steroid dehydrogenase, histidine, ornithine decarboxylase
Cell Sources	Activated T cells, mast cells, eosinophils, keratinocytes, NK cells, endothelial cells
Cell Targets	Erythroid cells, megakaryocytes, neutrophils, eosinophils, basophils, mast cells, monocytic lineages
Receptors	Heterodimer IL-3R α (CD123) and two alternate β -subunits, AIC2A binds IL-3 and is specific to IL-3R α , AIC2B (CDw131) shared in common with IL-5R, GM-CSFR
Biology Area	Immunology
Molecular Family	Cytokines/Chemokines
Antigen References	1. Fitzgerald, K., <i>et al.</i> Eds. 2001. The Cytokine FactsBook. Academic Press, San Diego. 2. Frendl, G., 1992. <i>Int. J. Immunopharmacol.</i> 14:421. 3. Ihle, J., 1992. <i>Chem. Immunology</i> 51:65. 4. Valen T, P., <i>et al.</i> 1990. <i>Blut</i> 61:338.
Regulation	Upregulated by T cell stimulation; downregulated by glucocorticoids
Gene ID	16187

Related Protocols

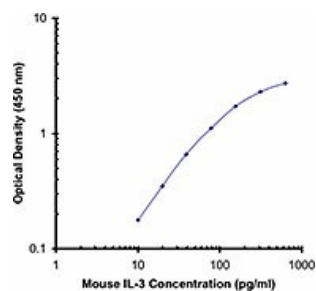
[Active Protocols: Sandwich ELISA - Video](#)

[Sandwich ELISA Protocol](#)

Other Formats

Biotin anti-mouse IL-3

Product Data



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.

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

