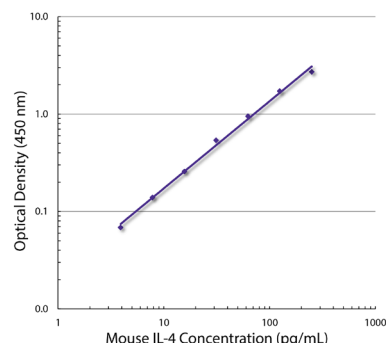




Rat Anti-Mouse IL-4

Cat. No.	Format	Size
10203-01	Purified (UNLB)	0.5 mg
10203-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg



Standard curve generated with Rat Anti-Mouse IL-4-UNLB (SB Cat. No. 10203-01; Clone BVD4-1D11) and Rat Anti-Mouse IL-4-BIOT (SB Cat. No. 10204-08; Clone BVD6-24G2) followed by Mouse Anti-BIOT-HRP (SB Cat. No. 6404-05)

Overview

Clone	BVD4-1D11
Isotype	Rat IgG _{2b} K
Immunogen	<i>E. coli</i> -expressed mouse IL-4
Specificity	Mouse IL-4
Alternate Name(s)	Interleukin-4, B cell stimulating factor-1, BSF-1, macrophage fusion factor, MFF, Hodgkin's cell growth factor, HCGF, mast cell growth factor-2, MCGF-2, T cell growth factor-2, TCGF-2, Ia inducing factor, IaIF

Applications

ELISA-Capture – Quality tested ^{1,2,4,5}
 ELISA-Detection – Reported in literature ³
 ELISPOT-Capture – Reported in literature ^{4,6-11}
 FC – Reported in literature ¹²⁻¹⁴
 IHC-FS – Reported in literature ^{13,15-19}
 IHC-PS – Reported in literature ¹⁷
 ICC – Reported in literature ¹
 WB – Reported in literature ²⁰
 IP – Reported in literature ²⁰
 Neut – Reported in literature ^{1-3,21}
 Multiplex-Capture – Reported in literature ²²

Note – May be paired with the biotinylated clone BVD6-24G2 (SB Cat. No. 10204-08) in a sandwich ELISA

Working Dilutions

ELISA	Purified (UNLB) antibody	≤ 1 µg/mL
Other Applications	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.	

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple freeze / thaw cycles.
- Reagents are stable for the period shown on the label if stored as directed.

References

1. Sander B, Hödén I, Andersson U, Möller E, Abrams JS. Similar frequencies and kinetics of cytokine producing cells in murine peripheral blood and spleen. Cytokine detection by immunoassay and intracellular immunostaining. J Immunol Methods. 1993;166:201-14. (Immunogen, ELISA-Capture, ICC, Neut)
2. Abrams JS, Roncarolo M, Yssel H, Andersson U, Gleich GJ, Silver JE. Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. Immunol Rev. 1992;127:5-24. (ELISA-Capture, Neut)
3. Finkelman FD, Madden KB, Morris SC, Holmes JM, Boiani N, Katona IM, et al. Anti-cytokine antibodies as carrier proteins. Prolongation of in vivo effects of exogenous cytokines by injection of cytokine-anti-cytokine antibody complexes. J Immunol. 1993;151:1235-44. (ELISA-Detection, Neut)
4. Bordmann G, Rudin W, Favre N. Immunization of mice with phosphatidylcholine drastically reduces the parasitaemia of subsequent Plasmodium chabaudi chabaudi blood-stage infections. Immunology. 1998;94:35-40. (ELISA-Capture, ELISPOT-Capture)
5. Abrams JS. Immunozytometric assay of mouse and human cytokines using NIP-labeled anti-cytokine antibodies. Curr Protoc Immunol. 2001;6.20:1-15. (ELISA-Capture)
6. Lu P, Zhou X, Chen S, Moorman M, Morris SC, Finkelman FD, et al. CTLA-4 ligands are required to induce an in vivo interleukin 4 response to a gastrointestinal nematode parasite. J Exp Med. 1994;180:693-8. (ELISPOT-Capture)
7. Favre N, Bordmann G, Rudin W. Comparison of cytokine measurements using ELISA, ELISPOT and semi-quantitative RT-PCR. J Immunol Methods. 1997;204:57-66. (ELISPOT-Capture)
8. Delogu G, Howard A, Collins FM, Morris SL. DNA vaccination against tuberculosis: expression of a ubiquitin-conjugated tuberculosis protein enhances antimycobacterial immunity. Infect Immun. 2000;68:3097-102. (ELISPOT-Capture)
9. Karulin AY, Hesse MD, Tary-Lehmann M, Lehmann PV. Single-cytokine-producing CD4 memory cells predominate in type 1 and type 2 immunity. J Immunol. 2000;164:1862-72. (ELISPOT-Capture)
10. Bower JF, Sanders KL, Ross TM. C3d enhances immune responses using low doses of DNA expressing the HIV-1 envelope from codon-optimized gene sequences. Curr HIV Res. 2005;3:191-8. (ELISPOT-Capture)
11. Klinman D. ELISPOT assay to detect cytokine-secreting murine and human cells. Curr Protoc Immunol. 2008;6.19:1-9. (ELISPOT-Capture)
12. Tripp RA, Moore D, Jones L, Sullender W, Winter J, Anderson LJ. Respiratory syncytial virus G and/or SH protein alters Th1 cytokines, natural killer cells, and neutrophils responding to pulmonary infection in BALB/c mice. J Virol. 1999;73:7099-107. (FC)
13. Khanna A, Morelli AE, Zhong C, Takayama T, Lu L, Thomson AW. Effects of liver-derived dendritic cell progenitors on Th1- and Th2-like cytokine responses in vitro and in vivo. J Immunol. 2000;164:1346-54. (FC, IHC-FS)
14. Gadue P, Stein PL. NK T cell precursors exhibit differential cytokine regulation and require Itk for efficient maturation. J Immunol. 2002;169:2397-406. (FC)
15. Martinelli TM, Van Driel IR, Alderuccio F, Gleeson PA, Toh B. Analysis of mononuclear cell infiltrate and cytokine production in murine autoimmune gastritis. Gastroenterology. 1996;110:1791-802. (IHC-FS)
16. Sunnemark D, Ulfgrén A, Örn A, Harris RA. Cytokine production in hearts of Trypanosoma cruzi-infected CBA mice: Do cytokine patterns in chronic stage reflect the establishment of myocardial pathology?. Scand J Immunol. 1996;44:421-9. (IHC-FS)
17. Whiteland JL, Shimeld C, Nicholls SM, Easty DL, Williams NA, Hill TJ. Immunohistochemical detection of cytokines in paraffin-embedded mouse tissues. J Immunol Methods. 1997;210:103-8. (IHC-FS, IHC-PS)
18. Hersmann GH, Kriegsmann J, Simon J, Hüttich C, Bräuer R. Expression of cell adhesion molecules and cytokines in murine antigen-induced arthritis. Cell Adhes Commun. 1998;6:69-82. (IHC-FS)
19. Issazadeh S, Abdallah K, Chitnis T, Chandraker A, Wells AD, Turka LA, et al. Role of passive T-cell death in chronic experimental autoimmune encephalomyelitis. J Clin Invest. 2000;105:1109-16. (IHC-FS)
20. Wang L, Cole KD, Peterson A, He H, Gaigalas AK. Monoclonal antibody selection for interleukin-4 quantification using suspension arrays and forward-phase protein microarrays. J Proteome Res. 2007;6:4720-7. (WB, IP)
21. Mori M, Morris SC, Orekhova T, Marinaro M, Giannini E, Finkelman FD. IL-4 promotes the migration of circulating B cells to the spleen and increases splenic B cell survival. J Immunol. 2000;164:5704-12. (Neut)
22. Carson RT, Vignali DA. Simultaneous quantitation of 15 cytokines using a multiplexed flow cytometric assay. J Immunol Methods. 1999;227:41-52. (ELISA-Capture, Multiplex-Capture)