

Technical Data Sheet

Biotin Mouse Anti-Rat IL-4

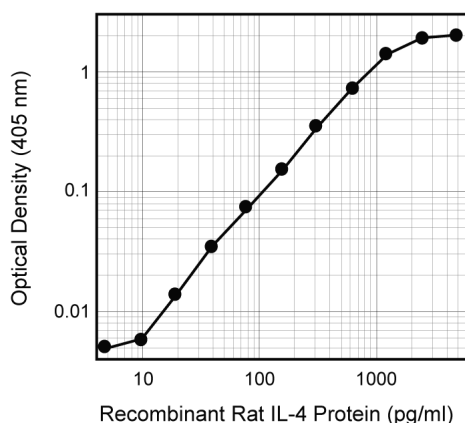
Product Information

Material Number:	555090
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	B11-3
Immunogen:	Immunoaffinity-purified, recombinant rat IL-4
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Rat
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The B11-3 antibody reacts with rat interleukin-4 (IL-4). The immunogen used to generate the B11-3 hybridoma was immunoaffinity-purified, recombinant rat IL-4. This is a non-neutralizing antibody.

This antibody is routinely tested by ELISA detection. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Rat IL-4 ELISA Standard Curve.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

ELISA Detection	Routinely Tested
-----------------	------------------

Recommended Assay Procedure:

ELISA: This biotinylated mouse anti-rat IL-4 antibody can be used as the detection antibody in a sandwich ELISA for measuring rat IL-4 protein levels in conjunction with purified OX-81 antibody (Cat. No. 555080) as the capture antibody and recombinant rat IL-4 protein (Cat. No. 555107) as the standard. This antibody pair does not cross react with rat IL-2, IL-10, TNF, GM-CSF, mouse IL-4, TNF, IFN- γ , human IL-4, IL-6, IL-10, IL-15, RANTES. This biotinylated detection antibody should be pretitrated in the range of 0.5 to 2 $\mu\text{g/ml}$ to determine its optimal concentration for ELISA. To obtain linear standard curves, doubling dilutions of recombinant rat IL-4 protein (e.g., ranging from ~5,120 to 5 pg/ml) are recommended for inclusion in each ELISA plate. For specific methodology, please visit our web site, www.bdbiosciences.com, and go to the protocols section or the chapter on ELISA in the Immune Function Handbook.

Note: This ELISA pair is recommended primarily for measuring cytokine from experimental cell culture systems. These ELISA reagents are not recommended for assay of serum or plasma samples. For measuring rat IL-4 in serum or plasma our rat IL-4 BD OptEIA set (Cat. No. 555198) is specially formulated and recommended.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD



Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
555080	Purified Mouse Anti-Rat IL-4	0.5 mg	OX-81
555107	Recombinant Rat IL-4	5 µg	(none)
555198	Rat IL-4 ELISA Set	20 plates	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Prigent P, Saoudi A, Pannetier C, et al. Mercuric chloride, a chemical responsible for T helper cell (Th)₂-mediated autoimmunity in brown Norway rats, directly triggers T cells to produce interleukin-4. *J Clin Invest.* 1995; 96(3):1484-1489. (Clone-specific: ELISA)

Ramirez F, Fowell DJ, Puklavec M, Simmonds S, Mason D. Glucocorticoids promote a TH₂ cytokine response by CD4⁺ T cells in vitro. *J Immunol.* 1996; 156(7):2406-2412. (Clone-specific: ELISA)

Saoudi A, Simmonds S, Huitinga I, Mason D. Prevention of experimental allergic encephalomyelitis in rats by targeting autoantigen to B cells: evidence that the protective mechanism depends on changes in the cytokine response and migratory properties of the autoantigen-specific T cells. *J Exp Med.* 1995; 182(2):335-344. (Clone-specific: ELISA)