

Datasheet for 209-406-B94**IL-7 Antibody Biotin Conjugated****Overview**

Description:	Anti-Human IL-7 (RABBIT) Antibody Biotin Conjugated - 209-406-B94
Item No.:	209-406-B94
Size:	100 µg
Applications:	WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Interleukin 7 (IL7) is a lymphoid cell growth factor that affects pre-B, pro-B, and early T cells. IL7 was previously known as pre-B cell growth factor and lymphopoietin 1. IL7 supports the growth of early B cells from long-term lymphoid bone marrow cultures. It is mitogenic to thymocytes and enhances the response of cells to other stimuli such as polyhydroxyalkanoate (PHA) and concanavalin A (ConA). IL7 stimulates the proliferation of CD4+/CD8+ cells. The proliferative response of thymocytes to IL7 is not affected by antibodies to the T cell growth factors such as IL2, IL4 and IL6, suggesting that IL7 is capable of stimulating T cell proliferation through a pathway independent of the known T cell growth factors. Mature T cells respond to IL7 and Con A, but not to IL7 alone. In myeloid lineage cells, IL7 upregulates the production of pro-inflammatory cytokines and stimulates the tumoricidal activity of monocytes/macrophages. IL7 is expressed by adherent stromal cells from various tissues.
Synonyms:	rabbit anti-IL-7 biotin conjugated antibody, rabbit anti-interleukin-7 antibody, IL7, IL-7 Interleukin 7, Interleukin-7
Host Species:	Rabbit
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	IL7
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Reactivity:	Human
Immunogen Type:	Recombinant Protein
Immunogen:	This purified antibody was prepared from whole rabbit serum produced by repeated immunizations with full length recombinant human IL-7 protein.
Purity/Specificity:	This product is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. This purified antibody has been heated to 56°C for 30 minutes. In ELISA and other immunoreactive assays, this antibody will recognize both native and recombinant human IL-7 in cell supernatants and certain body fluids. A control of similarly diluted normal rabbit IgG is recommended.
Relevant Links:	• UniProtKB - P13232 • NCBI - NP_000871.1 • GeneID - 3574

Application Details

Tested Applications:	WB
Application Note:	This purified antibody has been tested in western blotting and suitable for ELISA. By western blot a band approximately 17.4 kDa in size corresponding to human IL-7 protein is expected in the appropriate cell lysate or extract. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000-1:100,000
IHC:	1:1,000-1:5,000
WB:	1:2,000-1:10,000

Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL

Reconstitution Buffer: Restore with deionized water (or equivalent)

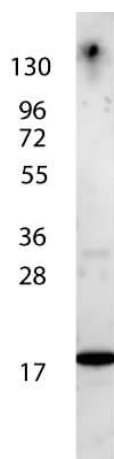
Shipping & Handling

Shipping Condition: Ambient

Storage Condition: Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Rockland's anti-Human IL-7 antibody shows detection of a band ~17 kDa in size corresponding to recombinant human IL-7. The identity of the faint higher molecular weight band may represent a homodimer. Molecular weight markers are also shown (left). After transfer, the membrane was blocked overnight with 3% BSA in TBS followed by reaction with primary antibody at a 1:1,000 dilution. Detection occurred using peroxidase conjugated anti-Rabbit IgG (p/n 611-103-122) secondary antibody diluted 1:40,000 in blocking buffer (p/n MB-070) for 30 min at RT followed by reaction with FemtoMax™ chemiluminescent substrate. Image was captured using VersaDoc™ MP 4000 imaging system (Bio-Rad).



Western Blot

Western Blot showing detection of Human IL-7. 50ng of Human IL-7 (Lane 1) was run on a 4-20% gel and transferred to 0.45 µm nitrocellulose. After blocking with 5% Blotto (p/n B501-0500) 30 min at 20°C, Anti-Human IL-7 (RABBIT) Antibody Biotin Conjugated (p/n 209-406-B94) secondary antibody was used at 1:1000 in Blocking Buffer for Fluorescent Western Blotting (p/n MB-070). HRP Streptavidin (p/n S000-03) was used at 1:40,000 in MB-070 for 30 min at 20°C and imaged using the Bio-Rad VersaDoc® 4000 MP. Arrow indicates correct 17 kDa molecular weight position expected for Human IL-7.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.