



Datasheet for ABIN964779 **anti-IL-7 antibody (Biotin)**



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2 Images

Overview

Quantity:	100 µg
Target:	IL-7 (IL7)
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IL-7 antibody is conjugated to Biotin
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	This purified antibody was prepared from whole rabbit serum produced by repeated immunizations with full length recombinant human IL-7 protein. Immunogen Type: RecombinantProtein
Isotype:	IgG
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.
Characteristics:	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

Product Details

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.

Purification: purified

Target Details

Target: IL-7 (IL7)

Alternative Name: IL-7 ([IL7 Products](#))

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: IL7, IL-7 Interleukin 7, Interleukin-7

Gene ID: 3574

NCBI Accession: [NP_000871](#)

UniProt: [P13232](#)

Pathways: [JAK-STAT Signaling](#)

Application Details

Application Notes: This purified antibody has been tested for use in ELISA and western blotting. By western blot a

Application Details

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.

Comment: Gene Name: IL7

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitution Buffer: Restore with deionized water (or equivalent), Reconstitution Volume: 100 μ L

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C/-20 °C

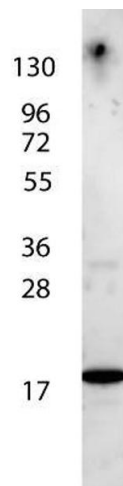
Storage Comment: Store vial at 4 °C prior to restoration. For extended storage aliquot contents and freeze at -20 °C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4 °C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of opening.

Expiry Date: 12 months



Western Blotting

Image 1. 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 30 min at 20°C, Anti-Human IL-7 (RABBIT) Antibody Biotin Conjugated secondary antibody was used at 1:1000 in Blocking Buffer for Fluorescent Western Blotting . HRP Streptavidin was used at 1:40,000 in ABIN925618 for 30 min at 20°C and imaged using the Bio-Rad 4000 MP. Arrow indicates correct 17 kDa molecular weight position expected for Human IL-7.



Western Blotting

Image 2. 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 secondary antibody diluted 1:40,000 in blocking buffer for 30 min at RT followed by reaction with chemiluminescent substrate. Image was captured using MP 4000 imaging system (Bio-Rad).