



Datasheet for ABIN233847
anti-IL7R antibody (pTyr449)



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2 Images

1 Publication

Overview

Quantity:	100 µg
Target:	IL7R
Binding Specificity:	pTyr449
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IL7R antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunoprecipitation (IP)

Product Details

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to residues near Y449 of mouse IL-7 protein.
Isotype:	IgG
Cross-Reactivity:	Mouse (Murine), Rat (Rattus)
Characteristics:	Concentration Definition: by UV absorbance at 280 nm

Target Details

Target:	IL7R
Alternative Name:	IL-7 Receptor Alpha Chain (IL7R Products)

Target Details

Background: This antibody is designed, produced, and is suitable for Cancer, Immunology and Nuclear Signaling research. Interleukin-7 is a glycoprotein involved in the regulation of lymphopoiesis. Response of cells to IL7 is dependent on the presence of the interleukin 7 receptor (IL7R); the active receptor is an alpha/gamma chain heterodimer. The gamma(c) chain, which also associates with the interleukin-2 receptor, serves primarily to activate signal transduction by the IL7R complex, while the alpha chain of IL7R determines specific signaling events through its association with cytoplasmic signaling molecules. The human and mouse sequence is nearly identical. In humans, severe combined immunodeficiency is caused by genetic defects in IL-7 receptor. The tyrosine residue at the 449 position is a critical signaling site of the intracellular domain of IL-7 receptor. This site is rapidly phosphorylated by janus kinases after the IL-7 receptor is engaged. IL-7 Receptor Alpha Chain phospho Y449 Antibody is ideal for investigators involved in Cell Signaling, Signal Transduction and Immunology research. Synonyms: IL7Ralpha antibody, Interleukin 7 receptor alpha chain antibody, Interleukin 7 receptor antibody

Gene ID: 16197, 45269152

UniProt: [P16872](#)

Pathways: [JAK-STAT Signaling](#), [Regulation of Leukocyte Mediated Immunity](#), [Production of Molecular Mediator of Immune Response](#), [Regulation of Cell Size](#)

Application Details

Application Notes: This affinity purified antibody has been tested for use in ELISA, immunoprecipitation, and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 55 kDa in size corresponding to phosphorylated IL-7 by western blotting in the appropriate cell lysate or extract. This phospho-specific polyclonal antibody reacts with mouse IL-7 pY449 and shows minimal reactivity by ELISA against the non-phosphorylated form of the immunizing peptide.

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 0.82 mg/mL

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

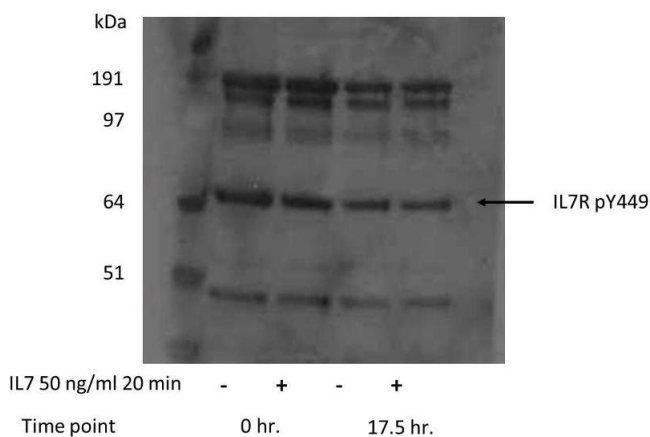
Handling

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:	-20 °C

Publications

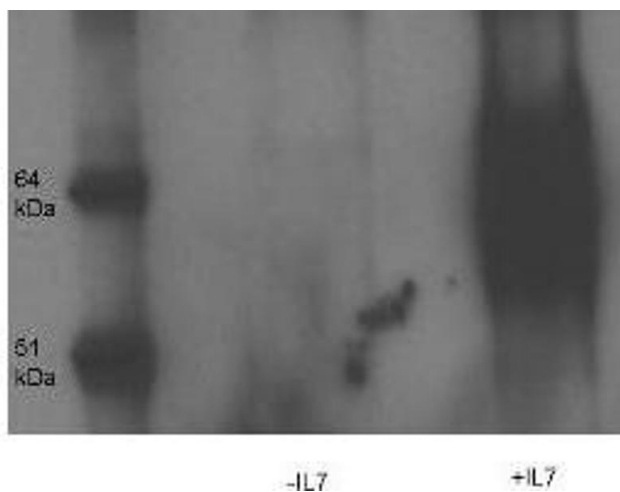
Product cited in: Osborne, Dhanji, Snow, Priatel, Ma, Miners, Teh, Goldsmith, Abraham: "Impaired CD8 T cell memory and CD4 T cell primary responses in IL-7R alpha mutant mice." in: **The Journal of experimental medicine**, Vol. 204, Issue 3, pp. 619-31, (2007) ([PubMed](#)).

Images



Western Blotting

Image 1.



Western Blotting

Image 2. Western Blot and immunoprecipitation of Rabbit anti- IL-7-Receptor-alpha-chain-pY449 antibody. Lane 1: thymocyte D1 cells. Lane 2: thymocyte D1 cells treated with IL7 (50 ng/ml). IP: with anti-Phosphotyrosine conjugated to Protein G agarose. Primary antibody: IL7pY449 antibody at 1:10000 for overnight at 4°C. Secondary antibody: HRP-conjugated goat anti-rabbit antibody at 1:10,000 for 45 min at RT and ECL detection. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 55 kDa, ~64 kDa for IL7pY449. Other band(s): unpecifics.