**Product Name: IL-7R (phospho Tyr449) Rabbit Polyclonal Antibody**
**Catalog #: APRab04842**

## Summary

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|---|---|
| **Production Name** | IL-7R (phospho Tyr449) Rabbit Polyclonal Antibody |
| **Description** | Rabbit Polyclonal Antibody |
| **Host** | Rabbit |
| **Application** | WB,IF,ELISA |
| **Reactivity** | Human,Mouse |

## Performance

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|---|---|
| **Conjugation** | Unconjugated |
| **Modification** | Phospho Antibody |
| **Isotype** | IgG |
| **Clonality** | Polyclonal |
| **Form** | Liquid |
| **Storage** | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |
| **Buffer** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N. |
| **Purification** | Affinity purification |

## Immunogen

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|---|---|
| **Gene Name** | IL7R |
| **Alternative Names** | IL7R; Interleukin-7 receptor subunit alpha; IL-7 receptor subunit alpha; IL-7R subunit alpha; IL-7R-alpha; IL-7RA; CDw127; CD antigen CD127 |
| **Gene ID** | 3575.0 |
| **SwissProt ID** | P16871.The antiserum was produced against synthesized peptide derived from human IL-7R/CD127 around the phosphorylation site of Tyr449. AA range:410-459 |

## Application

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|---|---|
| **Dilution Ratio** | WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications. |

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|---|---|
| **Molecular Weight** | 60kD |

## Background

The protein encoded by this gene is a receptor for interleukin 7 (IL7). The function of this receptor requires the interleukin 2 receptor, gamma chain (IL2RG), which is a common gamma chain shared by the receptors of various cytokines, including interleukins 2, 4, 7, 9, and 15. This protein has been shown to play a critical role in V(D)J recombination during lymphocyte development. Defects in this gene may be associated with severe combined immunodeficiency (SCID). Alternatively spliced transcript variants have been found. [provided by RefSeq, Dec 2015],disease:A genetic variation in transmembrane domain of IL7R is associated with susceptibility to multiple sclerosis (MS) [MIM:126200]. Overtransmission of the major 'C' allele coding for Thr-244 are detected in offspring affected with multiple sclerosis. In vitro analysis of transcripts from minigenes containing either 'C' allele (Thr-244) or 'T' allele (Ile-244) shows that the 'C' allele results in an approximately two-fold increase in the skipping of exon 6, leading to increased production of a soluble form of IL7R. Thus, the multiple sclerosis associated 'C' risk allele of IL7R would probably decrease membrane-bound expression of IL7R. As this risk allele is common in the general population, some additional triggers are probably required for the development and progression of MS.,disease:Defects in IL7R are a cause of autosomal recessive severe combined immunodeficiency T-cell-negative/B-cell-positive/NK cell-positive (T(-)/B(+)/NK(+) SCID) [MIM:608971]. SCID refers to a genetically and clinically group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels. Patients with SCID present in infancy with recurrent, persistent infections by opportunistic organisms, including Candida albicans, Pneumocystis carinii, and cytomegalovirus, among many others. The common characteristic of all types of SCID is absence of T-cell-mediated cellular immunity due to a defect in T-cell development.,domain:The box 1 motif is required for JAK interaction and/or activation.,domain:The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding.,function:Receptor for interleukin-7. Also acts as a receptor for thymic stromal lymphopoietin (TSLP).,online information:IL7R mutation db,sequence caution:Contaminating sequence. Potential poly-A sequence.,similarity:Belongs to the type I cytokine receptor family. Type 4 subfamily.,similarity:Contains 1 fibronectin type-III domain.,subunit:The IL7 receptor is an heterodimer of IL7R and IL2RG. The TSLP receptor is an heterodimer of CRLF2 and IL7R.,

## Research Area

Cytokine-cytokine receptor interaction;Jak_STAT;Hematopoietic cell lineage;Primary immunodeficiency;

## Image Data

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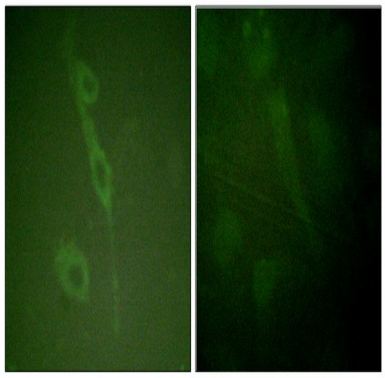
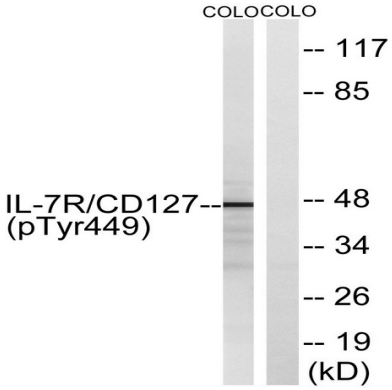


Immunofluorescence analysis of HUVEC cells, using IL-7R/CD127 (Phospho-Tyr449) Antibody. The picture on the right is blocked with the phospho peptide.




Western blot analysis of lysates from COLO205 cells, using IL-7R/CD127 (Phospho-Tyr449) Antibody. The lane on the right is blocked with the phospho peptide.

## Note

For research use only.