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

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phosphorylated
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000
<b>Molecular Weight</b>	60kDa

**Antigen Information**

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

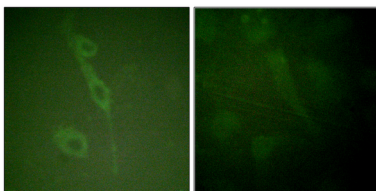
**Background**

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,

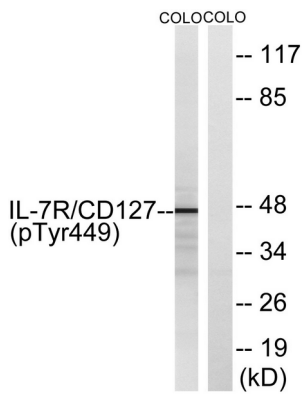
## Research Area

Cytokine-cytokine receptor interaction;Jak\_STAT;Hematopoietic cell lineage;Primary immunodeficiency;

## Image Data



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.