Product name:	IL-7R (phospho Tyr449) Rabbit Polyclonal Antibody
Cat number:	ABN04842
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human IL-7R/CD127 around the phosphorylation site of Tyr449. AA range:410-459
Reactivity:	Human,Mouse
Applications:	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000
Molecular Weight:	60kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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.,