

Datasheet for ABIN7505443
IL7R Protein (AA 21-239) (His tag)



[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	IL7R
Protein Characteristics:	AA 21-239
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This IL7R protein is labelled with His tag.

Product Details

Sequence:	Glu 21-Asp 239
Characteristics:	A DNA sequence encoding the mouse IL7R/IL-7R/CD127 protein (P16872) (Glu 21-Asp 239) was expressed with N-His tag.
Purity:	> 95 % as determined by reducing SDS-PAGE.

Target Details

Target:	IL7R
Alternative Name:	IL7R (IL7R Products)
Background:	<p>Abbreviation: IL7R,IL-7R,CD127</p> <p>Target Synonym: Interleukin-7 receptor subunit alpha,IL7r,IL-7 receptor subunit alpha,IL-7R subunit alpha,IL-7R-alpha,IL-7RA,CD127,IL-7Ralpha</p> <p>Background: Interleukin 7 Receptor alpha (IL-7RA), also known as CD127, is a 75 kDa</p>

Target Details

hematopoietin receptor superfamily member that plays an important role in lymphocyte differentiation, proliferation, and survival. IL-7RA signaling is essential for T-cell development and regulation of naive and memory T-cell homeostasis. Studies from both pathogenic and controlled HIV infection indicate that the containment of immune activation and preservation of CD127 expression are critical to the stability of CD4(+) T cells in infection. A better understanding of the factors regulating CD127 expression in HIV disease, particularly on T(CM) cells, might unveil new approaches exploiting the IL-7/IL-7R receptor pathway to restore T cell homeostasis and promote immune reconstitution in HIV infection. Factors relevant to HIV infection that could potentially decrease CD127 expression on human CD8(+) T cells. CD127 down-regulation may be an important contributor to HIV-associated T-cell dysfunction. In addition to IL-7, IL-7RA also associates with TSLPR to form the functional receptor for thymic stromal lymphopoietin (TSLP) which indirectly regulates T cell development by modulating dendritic cell activation. Mutations in the human IL-7RA gene cause a type of severe combined immunodeficiency in which the major deficiencies are in T cell development, whereas B and NK cells are relatively normal in number. Soluble CD127 (sCD127) appears to play an important role in the immunopathogenesis of several chronic infections, multiple sclerosis, and various cancers.

Molecular Weight:	Calculated MW: 23.98 kDa Observed MW: 32 kDa
UniProt:	P16872
Pathways:	JAK-STAT Signaling , Regulation of Leukocyte Mediated Immunity , Production of Molecular Mediator of Immune Response , Regulation of Cell Size

Application Details

Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Buffer:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Handling

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Expiry Date: 12 months