

# **Recombinant Human IL-17 Protein**

## **Product Information**

Product Name	Cat#	Size	
	90115ES08	5 µg	
Recombinant Human IL-17 Protein	90115ES60	100 µg	
	90115ES76	500 µg	

#### **Product Description**

IL17, also known as IL17a, is a cytokine that belongs to the IL-17 family. Cytokines are proteinaceous signaling compounds that are major mediators of the immune response. They control many different cellular functions including proliferation, differentiation, and cell survival/apoptosis but are also involved in several pathophysiological processes including viral infections and autoimmune diseases. Cytokines are synthesized under various stimuli by a variety of cells of both the innate (monocytes, macrophages, dendritic cells) and adaptive (T- and B-cells) immune systems. The IL-17 family of cytokines includes six members, IL-17/IL-17A, IL-17B, IL-17C, IL-17D, IL-17E/IL-25, and IL-17F, which are produced by multiple cell types. IL-17 regulates the activities of NF-kappaB and mitogen-activated protein kinases. This cytokine can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). High levels of IL-17 are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis, and multiple sclerosis.

## **Product Properties**

Synonyms	Cytotoxic T-lymphocyte-associated antigen 8, CLTA-8, IL-17A	
Accession	Q16552	
GeneID	3605	
Source	E.coli-derived human IL-17 protein, Gly24-Ala155.	
Molecular Weight	Approximately 31.0 kDa.	
AA Sequence	GITIPRNPGC PNSEDKNFPR TVMVNLNIHN RNTNTNPKRS SDYYNRSTSP WNLHRNEDPE	
	RYPSVIWEAK CRHLGCINAD GNVDYHMNSV PIQQEILVLR REPPHCPNSF RLEKILVSVG	
	CTCVTPIVHH VA	
Tag	None	
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.	
Purity	> 95% by SDS-PAGE and HPLC analyses.	
<b>Biological Activity</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by inducing IL-6 secretion	
	of murine NIH/3T3 cells is less than 7.5 ng/ml, corresponding to a specific activity of > $1.3 \times 10^5$ IU/mg	
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.	
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.	
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.	
	Reconstitute in 4 mM HCl to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned	
	into working aliquots and stored at $\leq$ -20°C. Further dilutions should be made in appropriate buffered	
	solutions.	

#### **Shipping and Storage**

The products are shipped with ice pack and can be stored at -20°C for 1 year.



1 month, 2 to 8  $^{\rm o}{\rm C}$  under sterile conditions after reconstitution.

3 months, -20  $^{\rm o}{\rm C}$  under sterile conditions after reconstitution.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

### Cautions

- 1. Avoid repeated freeze-thaw cycles.
- 2. For your safety and health, please wear lab coats and disposable gloves for operation.
- 3. For research use only.