# **Recombinant human IL-17A**

# CHO expressed human interleukin-17A with HSA

Catalog # rcyc-hil17a

For research use only, not for diagnostic or therapeutic use

Version # 16B26-MM

# PRODUCT INFORMATION

#### Content:

- $10 \mu g$  of recombinant human IL-17A provided as a white lyophilized powder
- 1.5 ml endotoxin-free water

# Storage and stability:

- Recombinant human IL-17A is shipped at room temperature. Upon receipt it should be stored at -20 °C.
- Upon resuspension, prepare aliquots of recombinant human IL-17A and store at  $4\,^\circ\text{C}$  for 1 week or at -20  $^\circ\text{C}$  to -80  $^\circ\text{C}$  for 12 months.

Note: Avoid repeated freeze-thaw cycles.

### **Quality control:**

- Purity greater than 95% as determined by SDS-PAGE
- Endotoxin: Less than 0.1 EU/ $\mu g$  as determined by the LAL method
- The biological activity has been confirmed using HEK-Blue™ IL-17 cells (see validation data sheet available on our website).

#### DESCRIPTION

Interleukin 17A (IL-17A), a pro-inflammatory cytokine, belongs to a family of six cytokines; IL-17A, IL-17B, IL-17C, IL-17D, IL-E (also known as IL-25) and IL-17F¹. IL-17A binds a heterodimeric cell surface receptor (IL-17RA/IL-17RC) triggering a signaling cascade that results in NF-κB activation, a key regulator of innate immunity². Although this cytokine exerts a protective role against many pathogens, the overproduction of IL-17A is associated with autoimmune diseases³.

Recombinant human IL-17A is intended for use in cell culture applications. Recombinant human IL-17A is produced in Chinese hamster ovary (CHO) cells transfected with the full-length sequence for the human IL-17A gene. These transfected cells produce and secrete biologically active IL-17A. Recombinant human IL-17A is purified by affinity chromatography.

1. Gu C. et al., 2013. IL-17 family: cytokines, receptors and signaling. Cytokine. 64(2):477-85. 2. Qu F. et al., 2012. TRAF6-dependent Act1 phosphorylation by the IkB kinase-related kinases suppresses interleukin-17-induced NF-kB activation. Mol Cell Biol. 32(19):3925-37. 3. Pappu R. et al., 2011. The interleukin-17 cytokine family: critical players in host defence and inflammatory diseases. Immunology. 134(1): 8–16.

#### **CHARACTERISTICS**

Source: Mammalian; Chinese hamster ovary (CHO) cells

Gene Name: IL-17A Gene ID: 3605 UniProt ID: Q16552

Molecular mass:  $\approx 16 \, \text{kDa}$  (as determined by SDS-PAGE under reducing conditions)

Formulation: Recombinant human IL-17 was lyophilized from a 0.2 μm filtered phosphate buffer solution (pH 7.4) containing human serum albumin (HSA).

**Solubility:** 100 µg/ml in water

#### **METHOD**

# Preparation of stock solution (100 µg/ml):

- 1. Add 100  $\mu$ l endotoxin-free water (provided) to 10  $\mu$ g of recombinant human IL-17A.
- 2. Mix by pipetting. Do not vortex.
- 3. Prepare aliquots of recombinant human IL-17A and store at  $4\,^{\circ}\text{C}$  for 1 week or at -20  $^{\circ}\text{C}$  to -80  $^{\circ}\text{C}$  for 12 months. Avoid freeze-thaw cycles.
- 4. Further dilutions can be prepared in the appropriate aqueous buffer, such as cell culture medium containing serum.

#### RELATED PRODUCTS

Product	Catalog Code
HEK-Blue™ IL-17 Cells	hkb-il17

