

## Recombinant Protein Technical Manual

# Recombinant Human IL17RA Protein (His Tag)(Active) RPES1394

#### **Product Data:**

**Product SKU:** RPES1394 **Size:** 50μg

Species: Human Expression host: HEK293 Cells

**Uniprot:** NP\_055154.3

#### **Protein Information:**

Molecular Mass: 35 kDa

AP Molecular Mass: 55-60 kDa

Tag: C-His

**Bio-activity:** 1. Measured by its binding ability in a functional ELISA. Immobilized recombinant

human IL17A at 2  $\mu$ g/ml (100  $\mu$ l/well) can bind biotinylated human IL17RA with a linear range of 1.28-32 ng/ml.2. Measured by its ability to inhibit IL7-induced IL-6 secretion by HFF human foreskin fibroblast cells. The ED50 for this effect is

typically 0.03-0.12 µg/mL.

**Purity:** > 97 % as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu \text{g}$  of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

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.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** CANDF5;CD217;CDw217;hIL7R;IL7RA;IL17R

## **Immunogen Information:**

Sequence: Met 1-Trp 320

### **Background**:

Interleukin7 receptor (IL7R), also known as Interleukin7 receptor A (IL7RA) and CD217 antigen (CD217), is a cytokine receptor which binds interleukin 17. IL7R/IL7RA (CD217) is a proinflammatory cytokine secreted by activated T-lymphocytes. It is a potent inducer of the maturation of CD34-positive hematopoietic precursors into neutrophils. IL7R/IL7RA (CD217) is a ubiquitous type I membrane glycoprotein that binds with low affinity to interleukin 17A. Interleukin 17A and its receptor IL7RA play a pathogenic role in many inflammatory and autoimmune diseases such as rheumatoid arthritis. Like other cytokine receptors, this receptor likely has a multimeric structure. Defects in IL7R/IL7RA (CD217) are the cause of familial candidiasis type 5 (CANDF5). CANDF5 is a rare disorder with altered immune responses and impaired clearance of fungal infections, selective against Candida. It is characterized by persistent and/or recurrent infections of the skin, nails and mucous membranes caused by organisms of the genus Candida, mainly Candida albicans.