

Human IL17RA / CD217 Protein (ECD, His Tag)

Catalog Number: 10895-H08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CANDF5; CD217; CDw217; hIL-17R; IL-17RA; IL17R

Protein Construction:

A DNA sequence encoding the extracellular domain of human IL17RA (NP_055154.3) (Met 1-Trp 320) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: ≥ 97 % as determined by SDS-PAGE. ≥ 95 % as determined by SEC-HPLC.

Bio Activity:

1. Measured by its binding ability in a functional ELISA. Immobilized recombinant human IL17A at 2 µg/ml (100 µl/well) can bind biotinylated human IL17RA with a linear range of 1.28-32 ng/ml. 2. Measured by its ability to inhibit IL-17-induced IL-6 secretion by NIH3T3 mouse embryonic fibroblast cells. The ED₅₀ for this effect is 0.271.2µg/mL in the presence of 5?ng/mL recombinant human IL?17.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Predicted N terminal: Leu 33

Molecular Mass:

The recombinant human IL17RA consists of 299 amino acids and has a predicted molecular mass of 35 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rh IL17RA is approximately 52-60 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Interleukin-17 receptor (IL-17R), also known as Interleukin-17 receptor A (IL-17RA) and CD217 antigen (CD217), is a cytokine receptor that binds interleukin 17. IL-17R/IL-17RA (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. IL-17R/IL-17RA (CD217) is a ubiquitous type I membrane glycoprotein that binds with low affinity to interleukin 17A. Interleukin 17A and its receptor IL-17RA 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 IL-17R/IL-17RA (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*.

References

1. Gaffen SL. (2009) Structure and signalling in the IL-17 receptor family. *Nat Rev Immunol.* 9 (8): 556-67.
2. Johansen C, *et al.* (2009) Characterization of the interleukin-17 isoforms and receptors in lesional psoriatic skin. *Br J Dermatol.* 160 (2): 319-24.
3. Yao Z, *et al.* (1997) Molecular characterization of the human interleukin (IL)-17 receptor. *Cytokine* 9 (11): 794-800.