ATAGENIX LABORATORIES

Catalog Number:ATMP00167HU

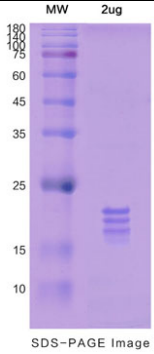
Recombinant Human IL17A protein ,No Tag

Product Details

Summary

English name	Recombinant Human IL17A protein ,No Tag
Purity	>90% as determined by SDS-PAGE
Endotoxin level	<1.0 EU per μg of the protein as determined by the LAL method.
Construction	A DNA sequence encoding the human IL17A(Ile20 -Ala155) was fused without Tag
Accession #	Q16552
Host	Mammalian cells
Species	Homo sapiens (Human)
Predicted Molecular Mass	15.07kDa
Formulation	Supplied as solution form in PBS or lyophilized from PBS .
Shipping	In general, proteins are provided as lyophilized powder/frozen liquid. They are shipped out with dry ice/blue ice unless customers require otherwise.
Stability &Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 °C for one week . Store at -20 to -80 °C for twelve months from the date of receipt.
Reconstitution	Reconstitute in sterile water for a stock solution.A copy of datasheet will be provided with the products, please refer to it for details.

SDS-PAGE image



SDS-PAGE Image

Background

Background	Interleukin-17A (IL17A) is also known as cytotoxic T-lymphocyte-associated antigen 8 (CTLA8),which is a proinflammatory cytokine produced by activated T cells. IL17A can regulate the activities of NF-kappaB and mitogen-activated protein

kinases. Also,IL17A can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). Furthermore,IL17A has been found both in glycosylated and nonglycosylated forms. High levels of IL-17 are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis.

Alternative Names IL-17A,Interleukin-17A,CTLA-8,IL-17

References Pereira Neto, Gonçalves-Pereira, de Queiroz, Ramos, de Oliveira, Oliveira-Prado, do Nascimento, Abdalla, Santos, Martins-Filho, Naveca, Teixeira-Carvalho, Santiago (2020) Multifunctional T cell response in convalescent patients two years after ZIKV infection Journal of leukocyte biology ()

Frontier progress

Zika is an important emerging infectious disease in which the role of T cells remains elusive. This study aimed to evaluate the phenotype of multifunctional T cells in individuals 2 yr after exposure to Zika virus (ZIKV). We used a library of 671 synthetic peptides covering the whole polyprotein of ZIKV in pools corresponding to each viral protein (i.e., capsid, membrane precursor or prM, envelope, NS1 [nonstructural protein], NS2A + NS2B, NS3, NS4A + NS4B, and NS5) to stimulate PBMCs from individuals previously exposed to ZIKV. We observed an increased frequency of ZIKV-specific IFNγ, IL-17A, TNF, and IL-10 production by T cell populations. IFNγ and TNF production were especially stimulated by prM, capsid, or NS1 in CD8+ T cells and by capsid or prM in CD4+ T cells. In addition, there was an increase in the frequency of IL-10+ CD8+ T cells after stimulation with prM, capsid, NS1, NS3, or NS5. Multifunctional properties were observed in ZIKV-specific T cells responding especially to prM, capsid, NS1 or, to a smaller extent, NS3 antigens. For example, we found a consistent IFNγ + TNF+ CD8+ T cell population in response to most virus antigens and CD4+ and CD8+ T cells that were IFNγ + IL-17A+ and IL-17A+IL-10+, which could also produce TNF, in response to capsid, prM, NS1, or NS3 stimulation. Interestingly, CD8+ T cells were more prone to a multifunctional phenotype than CD4+ T cells, and multifunctional T cells were more efficient at producing cytokines than single-function cells. This work provides relevant insights into the quality of ZIKV-specific T cell responses and ZIKV immunity.