

Active Recombinant Human IL17C protein

Cat. No. IL17C-185H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IL17C(His19-Val197) fused with Met at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	His19-Val197
Description	Interleukin-17C (IL-17C) is a 15-20 kDa glycosylated cytokine that plays an important role in mucosal immunity and chronic inflammation. The six IL-17 cytokines (IL-17A-F) are encoded by separate genes but adopt a conserved cystine knot fold. Mature human IL-17C shares 79% and 76% amino acid sequence identity with mouse and rat IL-17C, respectively. IL-17C binds to IL-17 RE with high affinity and to IL-17 RA with low affinity. These two receptor chains can associate into a heterodimeric receptor for IL-17C. IL-17 RE is expressed on keratinocytes, mucosal epithelial cells, Th17 cells, and gamma /δ T cells, while IL-17 RA is widely expressed. IL-17 RE is required for mediating the pro-inflammatory and homeostatic actions of IL-17C in the skin and mucosa. IL-17C expression is induced by inflammatory stimulation in colon and airway epithelial cells, keratinocytes, CD4+ T cells, macrophages, and dendritic cells. It is up-regulated in various chronic inflammatory diseases including psoriasis, cystic fibrosis, and chronic obstructive pulmonary disease (COPD). IL-17 RE is reciprocally down-regulated in psoriatic lesions (10). The interaction of IL-17C

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with IL-17 RE promotes mucosal immunity through the induction of anti-bacterial peptides and pro-inflammatory cytokines and chemokines. IL-17C action supports the integrity of the colon epithelium following infection induced damage but also contributes to psoriatic skin thickening and the progression of arthritis. IL-17C is additionally up-regulated in Th17 cell dependent autoimmunity. In this setting, it exacerbates disease severity by inducing Th17 cell production of IL-17A, IL-17F, IL-22, CCR6, and CCL20.

Predicted N Terminal	Met
Form	Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA with BSA as a carrier protein.
Bio-activity	Measured by its binding ability in a functional ELISA. When Recombinant Human IL-17 RE Fc Chimera is immobilized at 0.25 µg/mL (100 µL/well), the concentration of Recombinant Human IL-17C that produces 50% of the optimal binding response is 1.5-7.5 ng/mL.
Molecular Mass	Predicted Molecular Mass: 19.8 (monomer) kDa
Endotoxin	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 100 µg/mL in sterile 4 mM HCl containing at least 0.1% human or

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bovine serum albumin.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

GENE INFORMATION

Gene Name IL17C interleukin 17C [Homo sapiens]

Official Symbol IL17C

Synonyms IL17C; interleukin 17C; interleukin-17C; CX2; IL 17C; IL 21; MGC126884; MGC138401; cytokine CX2; IL-21; IL-17C;

Gene ID 27189

mRNA Refseq NM_013278

Protein Refseq NP_037410

MIM 604628

UniProt ID Q9P0M4

Chromosome Location 16q24

Function cytokine activity;

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