

Recombinant Human IL17A, Tag Free

Cat number: KGH1017A

Store at -80°C for 12 months

For Research Use Only (科研专用)

General Information

Synonyms	Human IL17A; hIL-17A, recombinant IL17A, interleukin 17A
Accession #	Q16552
Source	Human embryonic kidney cell, HEK293-derived human IL17A protein
	Gly24-Ala155
Predicted Molecular weight	15.1 kDa (Monomer)
Form/Structure	Dimer in solution

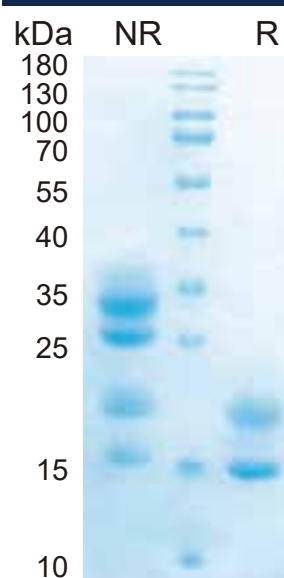
Components and Storage

Formulation	Solution protein. Dissolved in sterile PBS buffer, see tube wall for specific concentration. This solution can be diluted into other aqueous buffers. Centrifuge the vial prior to opening.
Storage and Stability	Avoid repeated freeze-thaw cycles. It is recommended that the protein be aliquoted for optimal storage. 12 months from date of receipt, -80 °C as supplied.
Shipping	Shipping with dry ice

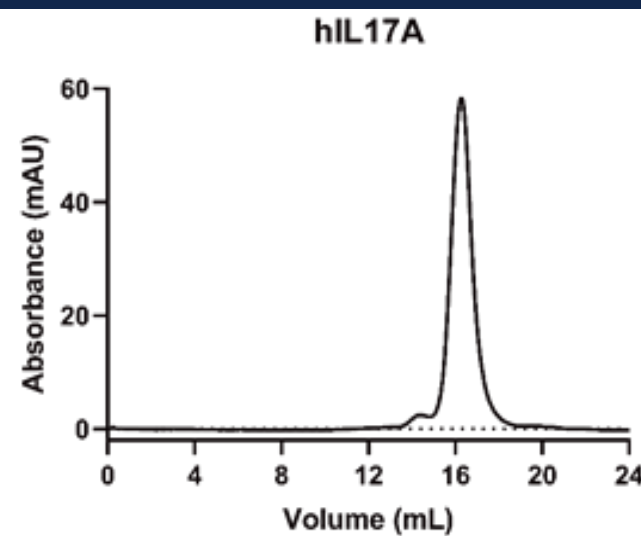
Quality

Purity	> 95%, determined by SDS-PAGE
Endotoxin Level	<0.010 EU per 1 ug of the protein by the LAL method
Activity	Measured by its ability to induce IL-6 secretion by NIH-3T3 mouse embryonic fibroblast cells. The ED50 for this effect is 1.0-7.5 ng/mL.

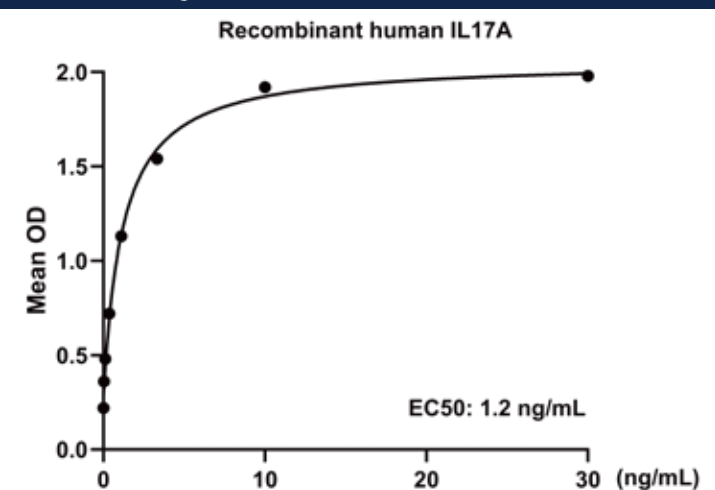
SDS-PAGE



Gel filtration



Bioactivity



Background

Interleukin-17A (IL-17A), also known as CTLA-8, is a 15-20 kDa glycosylated cytokine that plays an important role in anti-microbial and chronic inflammation. The six IL-17 cytokines (IL-17A-F) are encoded by separate genes but adopt a conserved cystine knot fold (1, 2). Mature human IL-17A shares 60% amino acid sequence identity with mouse and rat IL-17A (3, 4). IL-17A is secreted by Th17 cells, gamma / delta T cells, iNKT cells, NK cells, LTi cells, neutrophils, and intestinal Paneth cells (2). It forms disulfide-linked homodimers as well as disulfide-linked heterodimers with IL-17F (5, 6). IL-17A exerts its effects through the transmembrane IL-17RA in complex with IL-17RC or IL-17RD (7, 8). Both IL-17RA and IL-17RC are required for responsiveness to heterodimeric IL-17A/F (7). IL-17A promotes protective mucosal and epidermal inflammation in response to microbial infection (9-12). It induces chemokine production, neutrophil influx, and the production of antibacterial peptides (9-11). IL-17A/F likewise induces neutrophil migration, but IL-17F does not (11). IL-17A additionally enhances the production of inflammatory mediators by rheumatoid synovial fibroblasts and contributes to TNF-alpha induced shock (4, 13). In contrast, it can protect against the progression of colitis by limiting chronic inflammation (12). IL-17A has been shown to exert either tumorigenic or anti-tumor effects (14, 15).

Reference

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