

IL-17A Protein, Human (T26A, sf9, His)

Cat. No.:	HY-P73172
Synonyms:	CTLA8; CTLA-8; IL-17; Interleukin-17A; IL17A
Species:	Human
Source:	Sf9 insect cells
Accession:	Q16552 (G24-A155, T26A)
Gene ID:	3605
Molecular Weight:	15.9 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	<p>Interleukin-17A (IL-17A), also known as CTLA-8, belongs to the IL-17 cytokine family. IL-17A is expressed in memory Th17 cells and is a product of memory CD4⁺ T cells. IL-17A is also produced by a wide variety of immune cells, including CD8⁺ T cells, γδT cells, natural killer T (NKT) cells, monocytes, and neutrophils^{[1][2][3]}.</p> <p>The human IL-17A shares 63.23% amino acid sequence identity with mouse and 61.90% identity with rat.</p> <p>IL-17A plays a critical role in host defense mechanisms against many bacterial and fungal pathogens as well as allergic and autoimmune responses. IL-17A induces the production of antimicrobial peptides (defensins and S100 proteins), cytokines (IL-6, G-CSF, and GM-CSF), chemokines (CXCL1, CXCL5, IL-8, CCL2, and CCL7), and matrix metalloproteinases (MMP1, MMP3, and MMP13). IL-17A is detrimental in viral infection through promoting neutrophilic inflammation. IL-17A is a homodimeric cytokine and shares similar biological activities with IL-17F. IL-17A binds to IL-17RA with high affinity, and IL-17RA is required for the biological activity of IL-17A. In tumorigenesis, IL-17A recruits myeloid derived suppressor cells (MDSCs) to dampen anti-tumor immunity. IL-17A also enhances tumor growth in vivo through the induction of IL-6^{[1][2]}.</p> <p>IL-17A can be used for the research of autoimmune diseases, infection and cancer^{[1][4]}.</p>
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REFERENCES

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Caution: Product has not been fully validated for medical applications. For research use only.

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