

Active Recombinant Canine interleukin 17A protein, His tagged

Cat. No. IL17A-12C **Lot. No.** (See product label)

SPECIFICATION

Product Overview Recombinant canine IL-17A (29-155 aa), fused to Histag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Species Canine


Source HEK293

ProteinLength 29-155 aa

Description This gene is a member of the IL-17 receptor family which includes five members (IL-17RA-E) and the encoded protein is a proinflammatory cytokine produced by activated T cells. IL-17A-mediated downstream pathways induce the production of inflammatory molecules, chemokines, antimicrobial peptides, and remodeling proteins. The encoded protein elicits crucial impacts on host defense, cell trafficking, immune modulation, and tissue repair, with a key role in the induction of innate immune defenses. This cytokine stimulates non-hematopoietic cells and promotes chemokine production thereby attracting myeloid cells to inflammatory sites. This cytokine also regulates the activities of NF-kappaB and mitogen-activated protein kinases and can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). IL-17A plays a pivotal role in various infectious diseases, inflammatory and autoimmune disorders, and cancer. High levels of this cytokine are associated with several chronic inflammatory diseases

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including rheumatoid arthritis, psoriasis and multiple sclerosis. The lung damage induced by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is to a large extent, a result of the inflammatory response promoted by cytokines such as IL17A.

Tag	His
Form	Liquid
Bio-activity	The activity is determined by the IL-6 ELISA in a using NIH/3T3 mouse embryonic fibroblast cells. The ED50 range ≤ 10 ng/mL.
Molecular Mass	15.6 kDa (133aa)
AA Sequence	FPQNPGCRNTEDKNFPQHVKVNLNILNRNTNSRRPSDYNNRSTSPWNLHRNEDPE RYPVWEAKCRHLGCVNNEGNINYHMNSVPIQQEILVLRRESQHCPSFRLEKMLV AVGCTCVTPIVRHVA
Endotoxin	< 1 EU/ μ g by LAL
Purity	> 90% by SDS-PAGE
Applications	SDS-PAGE, Bioactivity
Storage	Can be stored at +2 to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 to -80 centigrade. Avoid repeated freezing and thawing cycles.
Storage Buffer	In Phosphate-Buffered Saline (pH 7.4) containing 20% glycerol.
Concentration	0.5 mg/mL (determined by Absorbance at 280nm)

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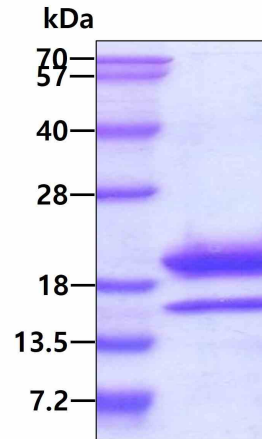
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Reference

1. Moseley TA., et al, (2003) Cytokine & Growth Factor Reviews. 14: 155-174.
2. Afzali, B. et al. (2007) Clin. Exp. Immunol. 148:32-46.
3. Fossiez, F. et al. (1996) J. Exp. Med. 183:2593-2603.

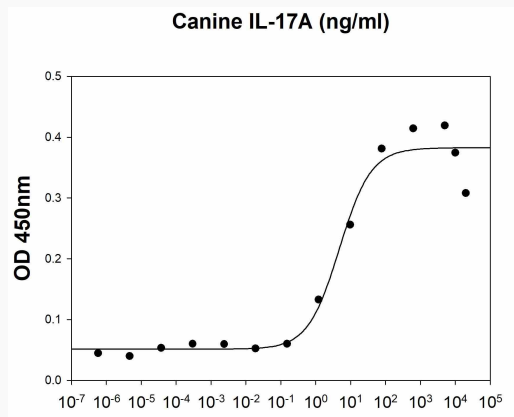
GENE INFORMATION**Gene Name** IL17A interleukin 17A [*Canis lupus familiaris* (dog)]**Official Symbol** IL17A**Synonyms** IL17A; interleukin 17A; interleukin-17A**Gene ID** 481837**mRNA Refseq** NM_001165878**Protein Refseq** NP_001159350**UniProt ID** C6L8D7 Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA

SDS-PAGE




3 µg by SDS-PAGE under reducing condition and visualized by coomassie blue stain


Biological Activity



Canine IL-17A stimulates IL-6 secretion of the NIH/3T3 mouse embryonic fibroblast cells. The ED50 range ≤ 10 ng/mL.

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