Active Recombinant Dog IL21 Protein

Cat. No. IL21-009D **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant canine IL-21, was expressed in E. coli and purified by using conventional chromatography techniques.
Species	Dog
Source	E.coli
Description	Cytokine with immunoregulatory activity. May promote the transition between innate and adaptive immunity. Induces the production of IgG1 and IgG3 in B-cells. Implicated in the generation and maintenance of T follicular helper (Tfh) cells and the formation of germinal-centers. Together with IL6, control the early generation of Tfh cells and are critical for an effective antibody response to acute viral infection. May play a role in proliferation and maturation of natural killer (NK) cells in synergy with IL15. May regulate proliferation of mature B- and T-cells in response to activating stimuli. In synergy with IL15 and IL18 stimulates interferon gamma production in T-cells and NK cells. During T-cell mediated immune response may inhibit dendritic cells (DC) activation and maturation.
Form	Liquid
Bio-activity	The activity is determined by the IFN-g ELISA in a using NK-92 human natural killer cells. The ED50 range ≤ 2 ng/mL.
Molecular Mass	15 kDa

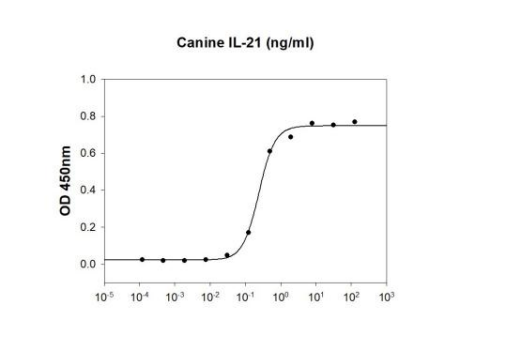
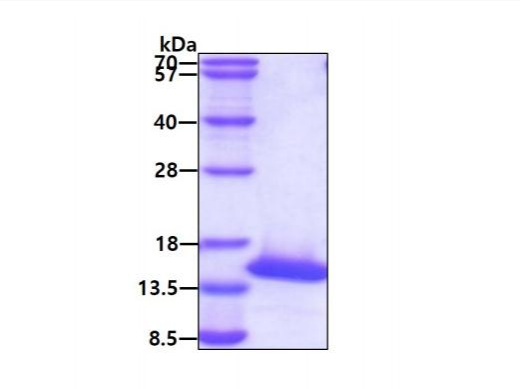
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AA Sequence	MHKSSFQEQDLLLIRMRQLIDIVDQLKNYVNDLDPESLPAPEDVKRHCERSAFSCFQKVQLKAANTGGNEQIINVLTKQLKRKLPPTNAGRRQKHRPACPSCDSYEKAPPKEFLERLKSLIQKMIHQHLS
Endotoxin	< 1 EU/μg of protein (determined by LAL method)
Purity	> 95% by SDS-PAGE
Applications	SDS-PAGE, Bioactivity
Storage	Can be stored at +2 to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 to -88 centigrade. Avoid repeated freezing and thawing cycles.
Concentration	0.5 mg/mL (determined by Absorbance at 280nm)
Storage Buffer	Phosphate-Buffered Saline (pH 7.4)

GENE INFORMATION

Gene Name	IL21 interleukin 21 [Canis lupus familiaris (dog)]
Official Symbol	IL21
Synonyms	IL21; interleukin 21; IL-21; interleukin-21
Gene ID	442935
mRNA Refseq	NM_001003347
Protein Refseq	NP_001003347.1

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UniProt ID	Q6L7I9
Biological Activity	 Canine IL-21 stimulates IFN-g secretion of the NK-92 human natural killer cells. The ED50 range ≤ 2 ng/mL.
SDS-PAGE	 3 µg by SDS-PAGE under reducing condition and visualized by coomassie blue stain

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