

IL-21 active protein

Recombinant canine IL-21 protein

CATALOG # AAA48379	HOST E Coli	APPLICATIONS SDS-Page
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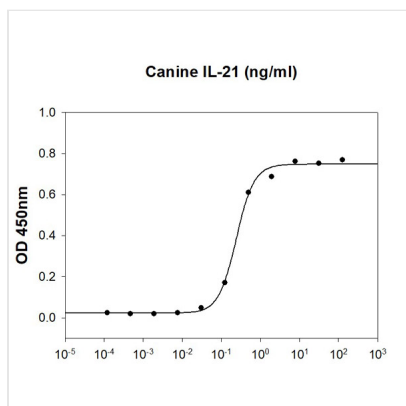
PRODUCT SYNONYMS

IL-21; Recombinant canine IL-21 protein; Interleukin-21; IL-21 active protein

PRODUCT SPECIFICATIONS

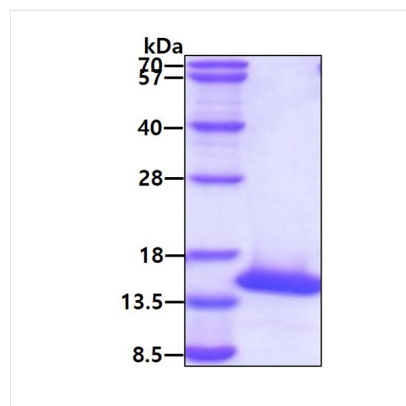
Host	E Coli
Purity/Purification	>95% by SDS-PAGE
Form/Format	Liquid. In Phosphate-Buffered Saline (pH7.4)
Concentration	0.5mg/ml (determined by absorbance at 280nm) (varies by lot)
Sequence Positions	18-146aa
Sequence	MHKSSFQEQD LLLIRMRQLI DIVDQLKNYV NDLDPESLPA PEDVKRHCER SAFSCFQKVQ LKAANTGGNE QIINVLTQQL KRKLPTNAG RRQKHPACP SCDSYEKAPP KEFLERLKSL IQKMIHQHLS
Applicable Applications for IL-21 active protein	Bioactivity, SDS-PAGE
Endotoxin	<1 EU per 1ug of protein (determined by LAL method)
Species	Canine
Tag	Non-Tagged
Bioactivity	The activity is determined by the IFN-g ELISA in a using NK-92 human natural killer cells. The ED50 range <= 2ng/ml.
Preparation and Storage	Can be stored at +2C to +8 degree C for 1 week. For long term storage, aliquot and store at -20C to -80 degree C. Avoid repeated freezing and thawing cycles.

IMAGES



Bioactivity

Canine IL-21 stimulates IFN-g secretion of the NK-92 human natural killer cells. The ED50 range



SDS-PAGE

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

ADDITIONAL INFORMATION

Related Product Information for IL-21 active protein	IL-21, also known as Interleukin-21, is an important modulator of natural killer (NK) cell function. However, little is known about IL-21 function in canine NK cells because the phenotype of these cells remains undefined. NK cells proliferated rapidly in response to activation by IL-21 for 3 weeks, and IL-21 was able to induce changes in the mRNA expression of NK cell-related receptors and enhance the effector function of NK cells in perforin- and granzyme-B-dependent manners. The duration, frequency and timing of IL-21 stimulation during culture affected the rate of proliferation, patterns of receptor expression, cytokine production, and anti-tumor activity. It has a potential predicating that synergistic interactions of IL-21 with IL-2 and IL-15 play an important role in the proliferation, receptor expression, and effector function of canine NK cells. Recombinant canine IL-21, was expressed in E Coli and purified by using conventional chromatography techniques.
Product Categories/Family for IL-21 active protein	Immunology; Proteins
References	DJ Shin., et al. (2015) Vet Immunol Immunopathol. 15;165(1-2):22-33. Gui G., et al. (2017) Clin Immunol. 183:266-272. Parrish-Novak J., et al. (2000) Nature. 408(6808):57-63.

NCBI AND UNIPROT INFORMATION

NCBI GI #	50979194
NCBI GeneID	442935
NCBI Accession #	NP_001003347.1
NCBI GenBank Nucleotide #	NM_001003347.1
UniProt Accession #	Q6L7I9
Molecular Weight	16,776 Da
NCBI Official Full Name	interleukin-21
NCBI Official Symbol	IL21
NCBI Official Synonym Symbols	IL-21
NCBI Protein Information	interleukin-21
UniProt Protein Name	Interleukin-21
UniProt Gene Name	IL21
UniProt Synonym Gene Names	IL-21
UniProt Entry Name	IL21_CANFA

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.