

Synonym

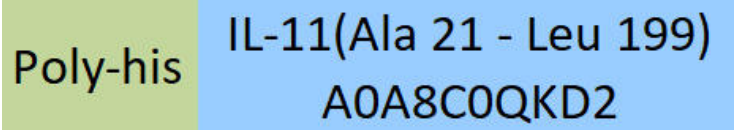
IL-11,Interleukin-11,AGIF,Oprelvekin,IL11

Source

Canine IL-11 Protein, His Tag(IL1-C5246) is expressed from human 293 cells (HEK293). It contains AA Ala 21 - Leu 199 (Accession # [A0A8C0QKD2](#)).

Predicted N-terminus: His

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 21 kDa. The protein migrates as 23-24 kDa and 26-27 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in 10 mM Citric acid, PBS, pH3.0 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

Storage

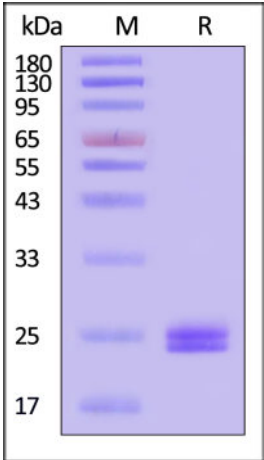
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

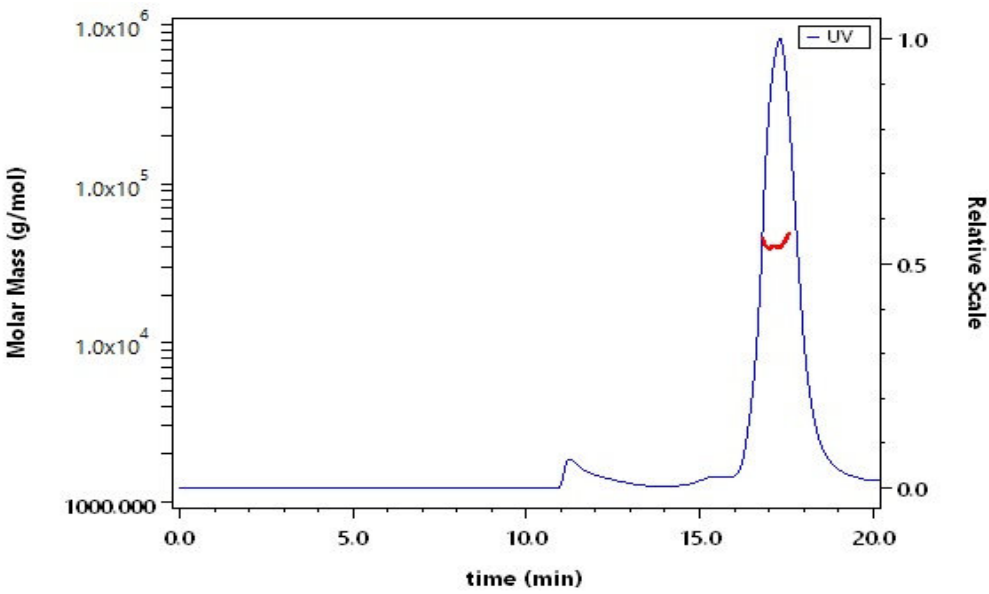
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Canine IL-11 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS

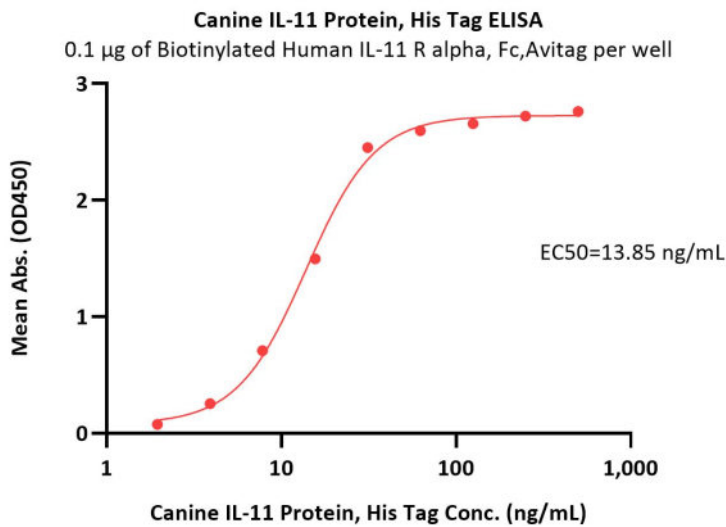


The purity of Canine IL-11 Protein, His Tag (Cat. No. IL1-C5246) is more than 90% and the molecular weight of this protein is around 22-42 kDa verified by SEC-MALS.

[Report](#)

Bioactivity-ELISA





Immobilized Biotinylated Human IL-11 R alpha, Fc,Avitag (Cat. No. ILR-H82F5) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Canine IL-11 Protein, His Tag (Cat. No. IL1-C5246) with a linear range of 2-31 ng/mL (QC tested).

Background

Interleukin-11 (IL-11) is a pleiotropic cytokine that stimulates megakaryocytopoiesis, resulting in increased production of platelets, as well as activating osteoclasts, inhibiting epithelial cell proliferation and apoptosis, and inhibiting macrophage mediator production. These functions may be particularly important in mediating the hematopoietic, osseous and mucosal protective effects of IL-11. The cytokine also possesses anti-inflammatory activity, and has been proposed as a therapeutic agent in the treatment of chronic inflammatory diseases, such as Crohn's disease and rheumatoid arthritis. Although IL-11 was initially believed to be restricted to mammals, subsequent studies demonstrated it to be expressed in fish. Despite close similarity in gene structure and conservation of key amino acids between fish and mammalian IL-11, they share relatively low overall amino acid identity and may not necessarily be functionally analogous.

