

Canine IL-31 Protein, Ultra Low Endotoxin

Cat. No. IL3-DM101-UL

Description

| | |
|-------------------------|---|
| Source | Recombinant Canine IL-31 Protein is expressed from HEK293 with His tag at the N-terminus. It contains Ala27-Gln159. |
| Accession | BAH97742.1 |
| Molecular Weight | The protein has a predicted MW of 16.63 kDa. Due to glycosylation, the protein migrates to 26-36 kDa based on Bis-Tris PAGE result. |
| Endotoxin | Less than 0.01 EU per µg by the LAL method. |
| Purity | > 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC |

Formulation and Storage

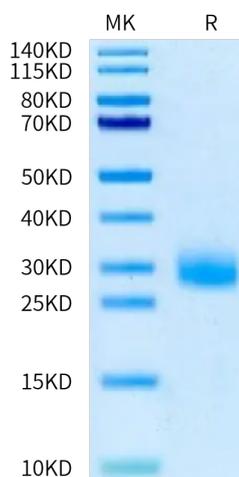
| | |
|-----------------------|---|
| Formulation | Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions. |
| Storage | -20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

Background

Many autoimmune skin diseases, such as bullous pemphigoid (BP), psoriasis and certain types of chronic urticaria, are associated with intensive pruritus. While histamine and neuropeptides have previously been ascribed to play a role in itch that accompanies these diseases, recent evidence suggests that the pruritogenic cytokine interleukin (IL)-31 is a major driver of pruritic responses. IL-31 was originally shown to be produced by activated helper T cells, particularly Th2 cells, mast cells, macrophages and dendritic cells.

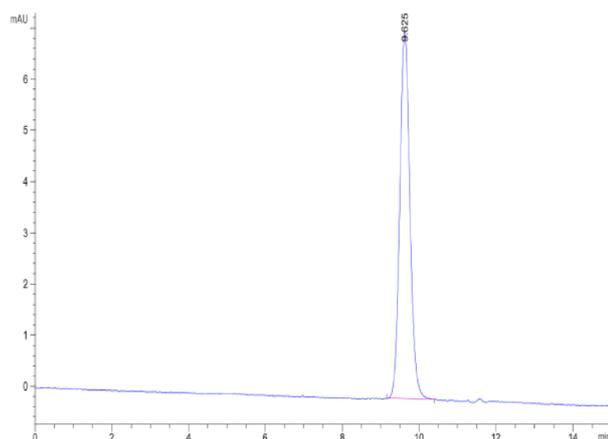
Assay Data

Bis-Tris PAGE



Canine IL-31 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

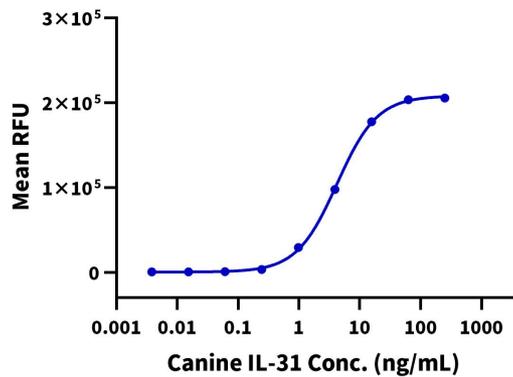


The purity of Canine IL-31 is greater than 95% as determined by SEC-HPLC.

Assay Data

Cell Based Assay

Recombinant Canine IL-31 Bioactivity



Measured by a reporter gene assay. The ED50 for this effect is < 10 ng/mL.