

Human IL-31 Protein; hFc Tag

Product Information

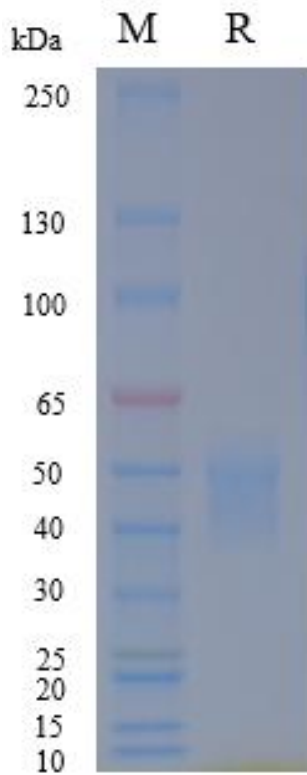
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|------------------------|---|
| Product Name | Human IL-31 Protein; hFc Tag |
| Storage temp | Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |
| Catalog# / Size | GM-88089RP-100 / 100 μg GM-88089RP-1000 / 1 mg |

Protein Information

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|---------------------------|--|
| Alternative Names | Interleukin-31 |
| Source | Human IL-31 Protein; hFc Tag (GM-88089RP) is expressed from human 293 cells (HEK-293). It contains AA Ser24-Thr164 (Accession # Q6EBC2-1). This protein carries a hFc tag at the N-terminus. |
| Purity | > 90% as determined by SDS-PAGE |
| Endotoxin | < 1 EU/ μg , determined by LAL gel clotting assay |
| Predicted Mol Mass | 42.6 kDa |
| Formulation | Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4. |
| Description | <p>IL-31 protein, whose full name is Interleukin-31, is an important inflammatory cytokine and a member of the IL-6 cytokine superfamily. IL-31 protein is primarily secreted by activated T cells, especially Th2 cells, and exerts its biological functions by binding to a heterodimeric receptor complex composed of IL-31RA and OSMR, thereby activating downstream signaling pathways including STAT3, STAT1, and STAT5. It plays a crucial role in regulating immune responses, inflammatory reactions, and neuroimmune interactions.</p> <p>Currently, the main clinically used drug targeting the IL-31 signaling pathway is Nemolizumab, a humanized monoclonal antibody that targets the IL-31 receptor alpha subunit (IL-31RA). By blocking the binding of IL-31 to its receptor, Nemolizumab inhibits the activation of downstream inflammatory signaling pathways, significantly alleviating pruritus and skin inflammation in patients, thereby improving their skin condition and quality of life.</p> <p>In summary, IL-31 protein plays a central role in the occurrence and development of inflammatory skin diseases and chronic pruritus. It is of great significance for understanding the pathogenesis of itch, developing novel targeted therapeutic strategies, and evaluating patient prognosis.</p> |

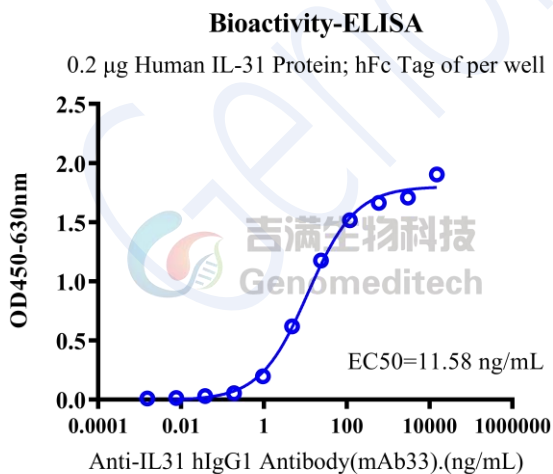
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SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Human IL-31 Protein; hFc Tag (Catalog # GM-88089RP) was immobilized at 2 μ g/ml (100 μ L/well). Increasing concentrations of Anti-IL31 hIgG1 Antibody(mAb33) (Catalog # GM-50883AB) were added.