

Human IL-31 Protein; His Tag

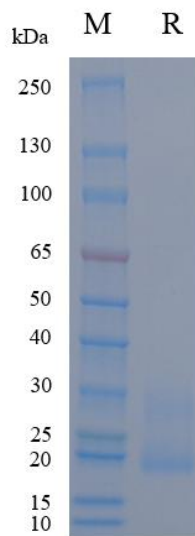
Product Information

Product Name	Human IL-31 Protein; His 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-88062RP-100 / 100 μg GM-88062RP-1000 / 1 mg

Protein Information

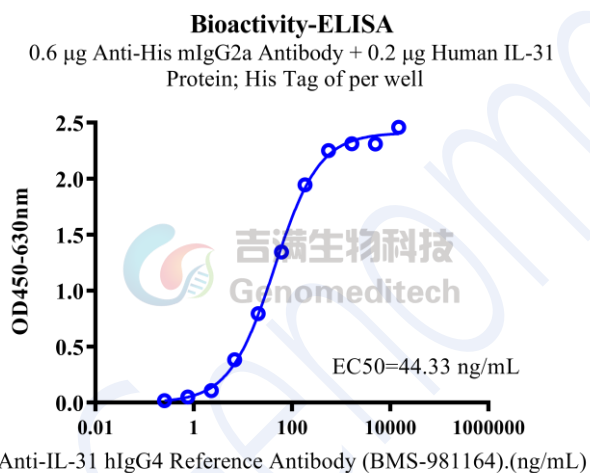
Alternative Names	IL-31, IL31, Interleukin-31
Source	Human IL-31 Protein; His Tag (GM-88062RP) is expressed from human 293 cells (HEK-293). It contains AA Ser 24 – Thr 164 (Accession # Q6EBC2-1). This protein carries a His tag at the N-terminus.
Purity	> 90% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	16.7 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	<p>IL-31 is a cytokine from the immune system, belonging to the interleukin family, typically existing as a homodimer or monomer and signaling through a receptor complex composed of IL-31RA and OSMRβ. It activates pathways such as JAK/STAT and MAPK, regulating cell proliferation, differentiation, and inflammatory responses. Under healthy conditions, IL-31 is primarily secreted by skin-resident cells including Th2 cells, mast cells, and basophils, as well as some epithelial cells; in inflammatory or allergic states, its expression is typically upregulated.</p> <p>IL-31 is closely linked to pruritus in inflammatory skin diseases, promoting keratinocyte activity, release of inflammatory mediators, and stimulation of nerve endings through the receptor complex, thereby driving itch and inflammation. In atopic dermatitis and other eczema-related conditions, IL-31 and its signaling pathways are often upregulated, making them potential therapeutic targets; drugs that neutralize IL-31 or interfere with IL-31RA signaling may alleviate itch and reduce inflammation.</p>

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; His Tag (Catalog # GM-88062RP) was immobilized at 2 μ g/ml (100 μ L/well) on Anti-His mIgG2a Antibody (Catalog # GM-59493AB) (0.6 μ g/well) precoated. Increasing concentrations of Anti-IL-31 hIgG4 Reference Antibody (BMS-981164) (Catalog # GM-88056MAB) were added.