

# Anti-IL-31 hlgG4 Reference Antibody (BMS-981164)

## Product Information

Product Name	Anti-IL-31 hlgG4 Reference Antibody (BMS-981164)
Storage temp.	Store at 2-8°C short term (1-2 weeks).Store at $\leq -20^{\circ}\text{C}$ long term. Avoid repeated freeze-thaw.
Catalog# / Size	<b>GM-88056MAB-1mg / 1 mg</b> <b>GM-88056MAB-5mg / 5 mg</b> <b>GM-88056MAB-25mg / 5 mg*5 vials</b> <b>GM-88056MAB-50mg / 50 mg</b> <b>GM-88056MAB-100mg / 50 mg*2 vials</b>

## Antibody Information

Expression System	CHO
Aggregation	< 5% as determined by SEC-HPLC
Purity	> 95% as determined by SDS-PAGE
Species Reactivity	Human
Clone	BMS-981164
Source/Isotype	Human IgG4(S228P), kappa
Application	Bioactivity-ELISA
Specificity	Detects IL-31
Gene	IL-31
Other Names	/
Gene ID	386653 (human)
Background	IL-31 is a cytokine belonging to the IL-6 family-related chemokine lineage, encoding a precursor protein that is secreted into an active form after splicing. It is regulated by inflammatory signals and barrier damage, etc. , the promoter region is regulated by STAT, NF-kb and other pathways, and there may be tissue-specific splice variants. IL-31 is mainly expressed in skin-associated immune cells (such as Th2 cells, mast cells, dendritic cell, etc.) and epithelial cells, with systemic baseline expression but higher in local inflammatory sites; It is closely related to inflammatory environment, barrier damage, infection and allergic reaction. Its function is to form a heterodimer with the receptor IL-31RA and co-receptor OSMR $\beta$ , which activates Jak/STAT, MAPK and other signaling pathways, it promotes pro-inflammatory response, cell proliferation and differentiation, as well as neuro-immune coupling and itch signaling, and participates in pathological processes such as eczema/atopic dermatitis and chronic pruritus. In terms of drug development, targets can be IL-31 ontology, IL-31RA or OSMR $\beta$ ,

Version:3.1

and antibody drugs need to take into account cross-species differences, structure-function relationships, and coordinated regulation of local and systemic inflammation in the skin, and combined with biomarkers to achieve patient stratification treatment.

Formulation

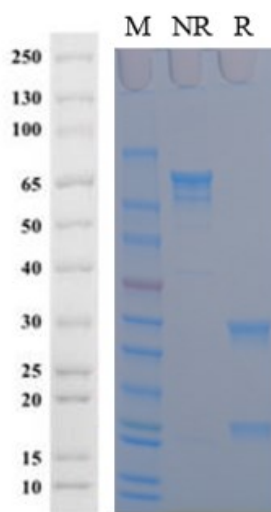
Phosphate-buffered solution, pH 7.2-7.4.

Endotoxin

< 1 EU/mg, determined by LAL gel clotting assay

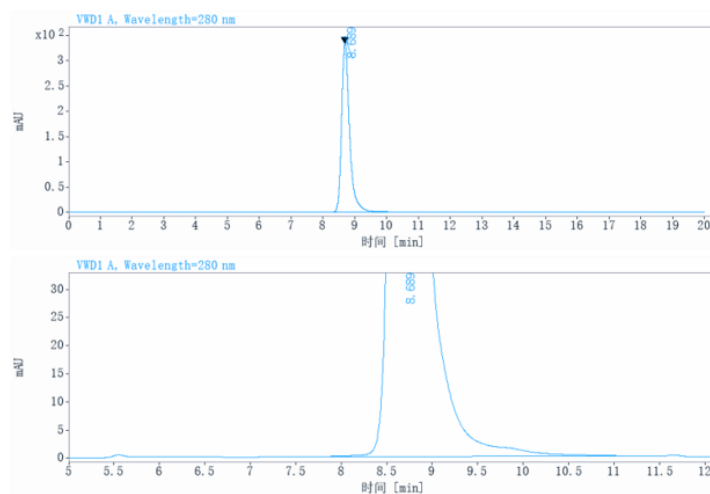
## Data Examples

### SDS-PAGE



On SDS-PAGE under reducing (R)/non-reducing(N-R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

### SEC-HPLC



The purity of this product is more than 95% verified by SEC-HPLC

## Bioactivity-ELISA

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

### Bioactivity-ELISA

0.6 µg Anti-His mIgG2a Antibody + 0.2 µg Human IL-31 Protein; His Tag of per well

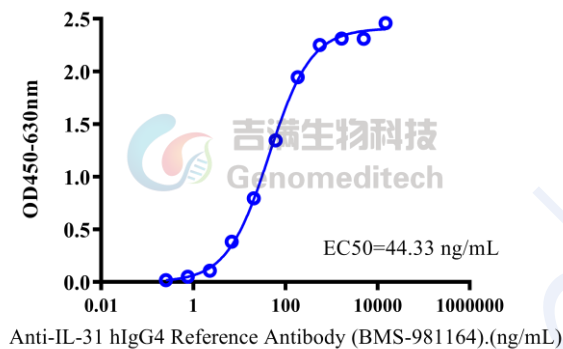


Fig. Assay