



SZABO SCANDIC

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Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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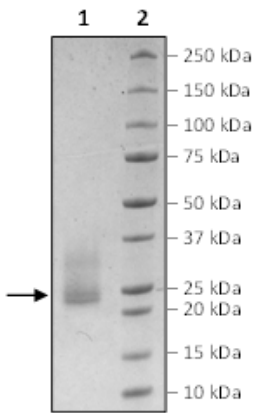
[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Product Information

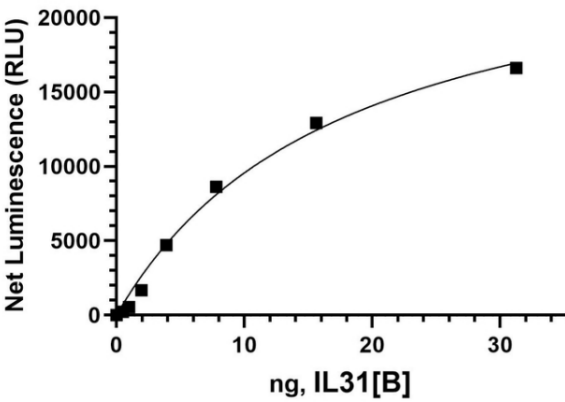
Description:	Recombinant human IL-31 (interleukin 31), encompassing amino acids 24-164(end). This construct contains an N-terminal His-tag (6xHis) followed by an Avi-Tag™. This protein is enzymatically biotinylated using Avi-Tag™ technology and affinity purified.
Background:	IL-31 (interleukin 31) is a four-helix bundle proinflammatory cytokine preferentially produced by T helper type 2 (T _H 2) cells. IL-31 regulates cell differentiation, cell proliferation, and immune responses, serving as a neuroimmune link between T _H 2 cells and sensory neurons in generating a T cell-mediated inflammatory itch. The IL-31 receptor complex, composed of IL-31RA and OSMR (human oncostatin M receptor beta), is expressed by various epithelial and immune cells as well as dorsal root ganglia sensory neurons. IL-31 interacts with the IL-31 receptor complex, activating Janus kinases JAK1 and JAK2. This activation leads to the phosphorylation of signal transducer and activator of transcription (STAT) molecules, mainly STAT3, which upregulate the genes responsible for the IL-31 induced itch sensation. Often referred to as the itchy cytokine, increased expression of IL-31 or its receptor IL-31RA is correlated with alopecia, skin lesions, airway hypersensitivity, and particularly pruritic disorders such as atopic dermatitis. IL-31 and other T _H 2 related cytokines (including IL-4, IL-13 and TSLP (thymic stromal lymphopoietin) play an important role in the pathogenesis of a variety of inflammatory and allergic diseases and have become popular for therapeutic development. The IL-31RA targeting antibody Nemolizumab has been FDA-approved for the treatment of atopic dermatitis.
Species:	Human
Construct:	IL-31 (His-Avi-24-164(end))-(Biotin)
Concentration:	0.34 mg/ml
Expression System:	HEK293
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	8 mM phosphate, 110 mM NaCl, 2.2 mM KCl, pH 7.4, and 20% glycerol.
MW:	19 kDa + glycans
Genbank Accession:	NM_001014336.2
Glycosylation:	This protein runs at a higher MW by SDS-PAGE due to glycosylation.
Label:	This protein is enzymatically biotinylated using Avi-Tag™ technology. Biotinylation is confirmed to be ≥90%.
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Assay Conditions:	A 96-well plate was coated with IL-31 His-Avi-Tag Recombinant (200 ng/well in PBS) at 4°C overnight. The plate was washed three times with PBST, and 200 µl Blocking Buffer 2 was added for 2 hours at room temperature (RT). After three washes in PBST, a 1:2 serial dilution of IL31Ra protein prepared in PP-02 Assay Buffer (BPS Bioscience #82620), was added and incubated at RT for 1 hour. The plate was washed three times and incubated with Streptavidin-HRP diluted 1:1000 in Blocking Buffer 2 for 1 hour at RT. After three washes, 100 µl of the ELISA ECL Substrate (BPS Bioscience #79670) was added to each well and chemiluminescence was measured.
Applications:	Useful for binding assays and avidin-pull down assays.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



IL-31 Binding Activity to IL-31Ra



Biotin-Avidin Pulldown

