



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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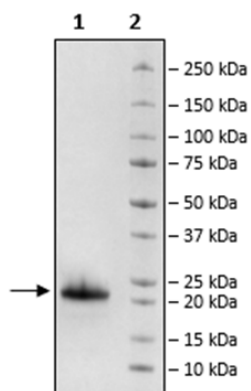
[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

## Product Information

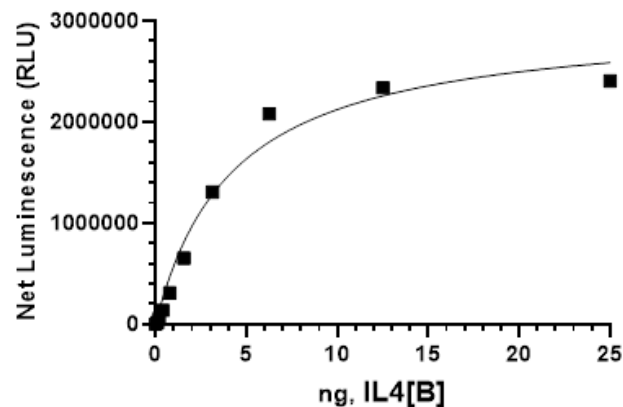
<b>Description:</b>	Recombinant IL-4 (interleukin 4), transcript variant 1, encompassing amino acids 25-153(end). This construct contains a C-terminal Avi-Tag™ followed by a His-tag (6xHis). The recombinant protein was enzymatically biotinylated using the Avi-Tag™ and affinity purified.
<b>Background:</b>	Interleukin-4 is produced mainly by a subpopulation of activated T cells (Th2) that are the biologically most active helper cells for B cells and that also secrete IL-5 and IL-6. The biological activities of IL-4 are mediated by a specific receptor. The extracellular domain of the IL-4 receptor is related to the receptors for EPO (erythropoietin), IL-6, and the beta chain of the IL-2 receptor (CD122). There are two types of receptors for IL-4. Type 1 receptor is a heterodimer consisting of IL-4Ralpha (IL-4Rα) and IL-4Rgamma (IL-4Rγ), mostly present on hematopoietic cells. The type 2 receptor is a heterodimer consisting of IL-4Ralpha and IL-13Ralpha1 (IL-13Rα1). IL-4 enhances expression of MHC (major histocompatibility class) 2 antigens on B cells. It can promote their capacity to respond to other B cell stimuli and to present antigens for T cells. Pretreatment of macrophages with IL-4 prevents the production of IL-1, TNFα (tumor necrosis factor alpha) and prostaglandins in response to activation of the cells by bacterial endotoxins or IFN-γ (interferon gamma). IL-4 plays crucial roles in inflammation, fibrosis, allergic reactions, and cancer. The therapeutic exploitation of IL-4 signaling pathways can result in advances in the treatment of auto-immune disorders.
<b>Species:</b>	Human
<b>Construct:</b>	IL-4 (25-153(end)-Avi-His)-(Biotin)
<b>Concentration:</b>	0.74 mg/ml
<b>Expression System:</b>	HEK293
<b>Purity:</b>	≥90%
<b>Format:</b>	Aqueous buffer solution.
<b>Formulated In:</b>	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
<b>MW:</b>	18 kDa + glycans
<b>Glycosylation:</b>	This protein runs at a higher MW by SDS-PAGE due to glycosylation.
<b>Label:</b>	This protein is enzymatically biotinylated using Avi-Tag™ technology. Biotinylation confirmed to be ≥90%.
<b>Endotoxin Level:</b>	11.5 EU/mg
<b>Genbank Accession:</b>	NM_000589.4
<b>Stability:</b>	At least 6 months at -80°C.
<b>Storage:</b>	-80°C
<b>Instructions for Use:</b>	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.
<b>Assay Conditions:</b>	A white 96-well plate was precoated with IL-4Ra/CD124, Fc-Fusion (IgG1), Avi-Tag, Recombinant (#102467) (100 ng/well). Blocking Buffer 2 (#79728) and PBST were used for blocking and washing steps, respectively. For protein titration a serial dilution of IL-4, Avi-His-Tag, Biotin-Labeled Recombinant (#102539) at the highest concentration of 1 ng/μl (25 ng/reaction) was prepared in 1x PP-02 Assay Buffer. Diluted IL-4 was then added to the wells and incubated at Room Temperature (RT) for 1 hour. The plate was then washed again and incubated with Streptavidin-HRP conjugate diluted 1:1000 in Blocking Buffer 2 for 1 hour at RT. After the final wash, ELISA ECL substrate mix (#79670) was added to each well and chemiluminescence was read.
<b>Applications:</b>	Useful for binding assays.

## Quality Control Data

### 4-20% SDS-PAGE Coomassie Staining



### IL-4Ra: IL-4[B] Binding Activity



### Biotin-Avidin Pulldown

