SZABO SCANDIC

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# 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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# IL-33, His-Avi-Tag Recombinant

Catalog: 102419
Lot: 241105

## Product Information

| | |
|---|---|
| **Description:** | Recombinant human IL-33 (Interleukin 33), encompassing amino acids 109-270. This construct contains an N-terminal His-tag (6xHis) followed by an Avi-Tag™. The recombinant protein was affinity purified. |
| **Background:** | IL-33 is a cytokine of the IL-1 family that is released in response to external triggers such as trauma, allergen exposure, and infections. IL-33 exists in a reduced or oxidized state, which trigger different signaling pathways. When in its reduced state (IL-33$^{red}$) it binds to IL-1RL1 ((interleukin 1 receptor like 1), also named IL-33R or ST2 (receptor serum-stimulated 2). IL-1RL1 exists as both a membrane bound protein or a truncated soluble form. Binding of IL-33 to IL-1RL1 initiates a signaling pathway that involves NF-κB (nuclear factor kappa-light-chain-enhancer of activated B cells) and MAPK (mitogen-activated protein kinase), and results in release of pro-inflammatory cytokines and chemokines. The soluble form of IL-1RL1 can act as a decoy receptor for IL-33. Dysregulation in the levels of IL-33 is implicated in the pathology of inflammatory and infectious diseases, including COVID-19, COPD (chronic obstructive pulmonary disease), and asthma. The involvement of IL-33 in these diseases has made it a high value therapeutic target, with strategies such as antibodies being developed to inhibit the binding of IL-33 to its receptor. One example is tozorakimab (MEDI3506), currently being evaluated as treatment for COPD. Further studies on IL-33 and its receptor will likely result in new therapies for IL-33 related disorders. |
| **Species:** | Human |
| **Construct:** | IL-33 (His-Avi-109-270) |
| **Concentration:** | 0.52 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:** | 21 kDa + glycans |
| **Endotoxin Level:** | 99.6 EU/mg |
| **Glycosylation:** | This protein runs at a higher MW by SDS-PAGE due to glycosylation. |
| **Genbank Accession:** | NM_033439.4 |
| **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-33, His-Avi-Tag Recombinant (100 ng/well in PBS) at 4°C overnight. The plate was washed three times with PBST, and 200 µl Blocking Buffer 3 was added for 2 hours at Room Temperature (RT). After three washes in PBST, a 1:2 serial dilution of IL-33 protein prepared in PP-02 Assay Buffer (#82620), was added and incubated at RT for 1 hour. The plate was washed three times and incubated with anti-His-HRP conjugate diluted of 1:2000 in Blocking Buffer 3 for 1 hour at RT. After three washes, 100 µl of ELISA ECL Substrate (#79670) was added to each well and chemiluminescence was measured. |
| **Applications:** | Useful for binding studies. |

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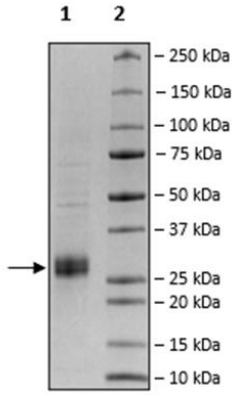
## Quality Control Data

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




### IL33 Binding Activity to IL1RL1