



# 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

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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## Anti-IL-2 [NARA1] Bulk Size Ab03232-10.0-BT

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG2a format for improved compatibility with existing reagents assays and techniques.

**Isotype and Format:** Human IgG1, Kappa

**Clone Number:** NARA1

**Alternative Name(s) of Target:** IL2; IL-2; TCGF; Interleukin-2; T-cell growth factor; Aldesleukin

**UniProt Accession Number of Target Protein:** P60568

**Published Application(s):** crystallography, in vitro, in vivo, SPR, FC

**Published Species Reactivity:** Human

**Immunogen:** The original antibody was generated immunizing Balb/c mice with human IL-2.

**Specificity:** The antibody is specific for human IL-2. The antibody binds to a three-dimensional epitope of hIL-2 (residues P34, K35, R38, T41, Q74, and K76). The antibody overlaps with the CD25-binding epitope of IL-2. The antibody does not cross reacts with mouse IL-2.

**Application Notes:** SPR showed the binding of the antibody to IL-2 prevented further binding of hCD25 to IL-2; the affinity of the antibody to hIL-2 was  $\sim 10^{-9}$  M. The crystal structure of the Fab fragment in complex with IL-2 was determined. IL-2/antibody complexes preferentially expand CD8<sup>+</sup> T and NK cells in vivo while disfavoring CD25<sup>+</sup> Tregs in transplantable metastatic melanoma model. This difference was also confirmed by kinetic proliferation studies. The complex IL-2/antibody decreased the tumor growth in mice by increasing the CD8<sup>+</sup> T cell responses. The IL-2/antibody complex immunotherapy was also efficacious in a spontaneous melanoma model in mice. The complex IL-2/antibody shows potential as a therapeutic agent as it achieved strong antitumor immune responses (Arenas-Ramirez et al., 2016; PMID: 27903862). In order to prevent in vivo dissociation of the complex IL-2/antibody, NARA1leukin was constructed by integrating IL-2 into the antigen-binding groove on the antibody. The NARA1leukin version showed a longer half-life in vivo and more expansion of CD8<sup>+</sup> T and NK cells, with no association with CD25, leading to a stronger antitumor response in B16-F10 murine models (Sahin et al., 2020; PMID: 33353953). The use of hIL-2/NARA1 in combination with Ezh2, an inhibitor of the histone methyltransferase enhancer of zeste homolog 2, showed enhanced tumor control in several mouse models of melanoma (Zingg et al., 2017; PMID: 28746871).

**Antibody First Published in:** Ramirez et al. Improved cancer immunotherapy by a CD25-mimobody conferring selectivity to human interleukin-2. *Sci Transl Med.* 2016 Nov 30;8(367):367ra166.

[PMID:27903862](#)

**Note on publication:** The paper describes the generation and characterization of the antibody, which is specific for IL-2 and it overlaps with the CD25-binding epitope of IL-2.

## Product Form

**Size:** 1 mg Purified antibody in bulk size.

**Purification:** Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.