



# 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

### SZABO-SCANDIC HandelsgmbH

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## Anti-IL-2 [NARA1] Standard Size Ab03232-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

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, Fc Silent™, 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+ T and NK cells in vivo while disfavoring CD25+ 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+ 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+ 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:** 200 µg Purified antibody.

**Purification:** Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. 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.