



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

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

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

Anti-*S. aureus* β -GlcNAc WTA [4497] Standard Size Ab04039-10.3

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

This is a reformatted human IgG1 Fc Silent Fc Silent™ antibody, based on the original human IgG1 format, created for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: 4497

Alternative Name(s) of Target: TA; Teichoic acids; WTA; Wall teichoic acids; GlcNAc; N-Acetylglucosamine; β -WTA; β -GlcNAc; β -1,4-GlcNAc; β -O-linked N-acetylglucosamine; β -O-linked GlcNAc sugar modifications on WTA

UniProt Accession Number of Target Protein:

Published Application(s): in vitro, in vivo, RBA, ELISA, FC, IF

Published Species Reactivity: *Staphylococcus aureus*

Immunogen: The original antibody was generated by cloning human IgG antibodies from peripheral B cells of patients who had been infected with *S. aureus*.

Specificity: This antibody is specific for *S. aureus* β -GlcNAc wall-teichoic acids (WTAs), a pathogen-specific polyanionic glycopolymer that is connected to the thick peptidoglycan layers of Gram-positive bacteria.

Application Notes: The original format of this antibody (human IgG1) was screened for antigen binding specificity using ELISA, and it was successfully used antibody was used in flow cytometry (FC) to label *S. aureus* (Lehar et al., 2015; PMID: 26536114). This antibody was used in a radioligand binding assay (RBA); affinity analysis and epitope counting were performed by saturation binding analysis using a radio-iodinated version of the antibody (Fong et al., 2018; PMID: 30102105). This antibody was observed to bind strongly to planktonic Wood46 (ATCC 10832) *S. aureus* cells but very weakly to planktonic LAC Δ spa Δ sbi (AH4116) *S. aureus*. When studying the binding of WTA-specific antibodies to biofilms, this antibody was observed to bind strongly to PNAG-positive biofilm formed by Wood46 and bind *S. aureus* Wood46 in both planktonic and biofilm states. Apart from recognizing PNAG-positive biofilms, this antibody was also found to bind the PNAG-negative biofilm formed by LAC Δ spa Δ sbi. Using IF, this antibody was confirmed to bind WTA in PNAG-positive and PNAG-negative *in vitro* biofilm. This antibody was tested in a subcutaneously implanted pre-colonized catheter in mice and was found to localize to biofilm rapidly *in vivo* (de Vor et al.,

2022; PMID: 34989676).

Antibody First Published in: Lehar et al. Novel antibody-antibiotic conjugate eliminates intracellular *S. Aureus* Nature. 2015 Nov 19;527(7578):323-8. doi: 10.1038/nature16057 [PMID:26536114](#)

Note on publication: The original publication describes the generation, characterization, and utilization of anti-*S. Aureus* β -WTA antibodies to treat intracellular reservoirs of *Staphylococcus aureus* in mice.

Product Form

Size: 100 μ g 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.