



# 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-Nicotine [F018] Bulk Size Ab03254-11.3-BT

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 IgG2 Fc Silent™ antibody, based on the original human scFv format, created for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Human IgG2, Fc Silent™, Lambda

**Clone Number:** F018

**Alternative Name(s) of Target:** Nicotin; rac-3-(1-methylpyrrolidin-2-yl)pyridine; CAS: 54-11-5; CHEBI:18723; Nic12

**UniProt Accession Number of Target Protein:**

**Published Application(s):** immunotherapy, ELISA

**Published Species Reactivity:** Species independent

**Immunogen:** Peripheral blood mononuclear cells (PBMC) were isolated from 32 ml of heparinized blood of a Qβ-Nicotine-vaccinated volunteer. Antigen-specific B cells were used for the construction of a Sindbis-based scFv cell surface display library. The original antibody isolated from this antibody after panning against RNase-Nicotine.

**Specificity:** This antibody reacts with nicotine. Nicotine is a plant alkaloid, found in the tobacco plant and other plants of the nightshade family. It is an addictive central nervous system (CNS) stimulant that causes either ganglionic stimulation in low doses or ganglionic blockage in high doses. It is the main psychoactive ingredient in tobacco products and a major component of cigarettes, which is also used therapeutically to help with smoking cessation and reduce withdrawal symptoms.

**Application Notes:** The binding characterization of this antibody to nicotine was done using ELISA. The original scFv and human IgG2 version of this antibody binds (S)-(-)-nicotine with an affinity of  $K_d = 11.5 \pm 1.5$  nM and  $K_d = 7.4 \pm 1.2$  nM respectively. This antibody does not cross react with (-)-cotinine and acetylcholine. It was estimated that IgG2-F018 binds (-)-cotinine about 1000 fold less strongly than (S)-(-)-nicotine. The IgG2 version of this antibody is also capable of recognizing (R)-(+)-nicotine. The IgG2 version of this antibody was used to study the distribution of nicotine in plasma and brain in mice. It was reported that this antibody can reduce the entry of nicotine to the brain by more than 60% (US8344111).

**Antibody First Published in:** [PMID:](#)

**Note on publication:**

## 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.