



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

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

## Anti-Nicotine [F018] Bulk Size Ab03254-23.0-BT

This full-length chimeric rabbit antibody was made using the variable domain sequences of the original Human scFv format for improved compatibility with existing reagents assays and techniques.

**Isotype and Format:** Rabbit IgG, 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 Q $\beta$ -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 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.