



# 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-Collagen I [AFA] Bulk Size Ab04239-10.3-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 IgG1 Fc Silent Fc Silent™ antibody, based on the original human IgA format, created for improved compatibility with existing reagents, assays and techniques.

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

**Clone Number:** AFA

**Alternative Name(s) of Target:** CTTR1;  $\alpha$ 2Ct;  $\alpha$ 2(I)C-telopeptide; C-terminal telopeptide of the  $\alpha$ 2 chain; Procollagen I

**UniProt Accession Number of Target Protein:**

**Published Application(s):** in vivo, therapeutic, Block

**Published Species Reactivity:** Human

**Immunogen:** The original antibody was produced by immunizing mice with a synthetic peptide (GGGYDFGYDGFYRA) whose sequence corresponds to that of the C-terminal telopeptide of the  $\alpha$ 2 chain ( $\alpha$ 2Ct).

**Specificity:** This antibody is specific for human collagen I, showing high affinity to the GDF sequence (in A2\_DGDFY, part of the  $\alpha$ 2(I)C-telopeptide), suggesting it is a critical epitope.

**Application Notes:** This antibody binds human collagen I and blocks the binding activity of its C-terminal telopeptide region (denoted as CTTR1) consisting of two  $\alpha$ 1(I)C-telopeptides (denoted as  $\alpha$ 1Ct) and one  $\alpha$ 2(I)C-telopeptide (denoted as  $\alpha$ 2Ct). The  $K_D$  of this antibody and its Fab and scFv with native  $\alpha$ 2Ct present in procollagen I and with synthetic  $\alpha$ 2Ct were 663 pM, 268 nM, 21 pM, 57 nM, and 75nM for full-length AFA/procollagen I, Fab AFA antibody/procollagen I, full-length AFA antibody/synthetic  $\alpha$ 2Ct, Fab AFA antibody/synthetic  $\alpha$ 2Ct, and scFv/procollagen I, respectively (US20200048333A1). A chimeric IgG version of the original IgA version of this antibody was engineered (Fertala et al., 2013; PMID: 23586407). This antibody has been shown to be an effective therapeutic tool for blocking collagen fibril formation in various models (Fertala et al., 2017; PMID: 28972447) (Fertala et al., 2017; PMID: 23586407).

**Antibody First Published in:** Chung et al. Collagen fibril formation. A new target to limit fibrosis J Biol Chem. 2008 Sep 19;283(38):25879-86. doi: 10.1074/jbc.M804272200 PMID:18650436

**Note on publication:** The original publication introduces a novel concept for reducing fibrotic deposits by inhibiting the self-assembly of collagen molecules into fibrils, utilizing monoclonal antibodies targeting the telopeptide region to block collagen interactions and demonstrating efficacy in reducing collagen fibrils in

vitro and in organotypic constructs.

## 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.