

# 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 type II [CIIC1 ] Standard Size Ab03291-10.3

This antibody was created using our proprietary Fc Silent<sup>™</sup> 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<sup>™</sup>, Kappa

Clone Number: CIIC1

Alternative Name(s) of Target: CII; Alpha-1 type II collagen; Collagen alpha-1(II) chain

**UniProt Accession Number of Target Protein:** P02458

Published Application(s): crystallization, in vitro, in vivo, WB, ELISA, IHC

Published Species Reactivity: Bovine, chick, Rat, Human, Mouse

**Immunogen:** The original antibody was generated by immunizing DBA/1 mice with chick sternal type II collagen.

**Specificity:** The antibody binds the triple helical C1 epitope (GARGLT) of collagen type II.

**Application Notes:** This anti-collagen type II antibody CIIC1 is an arthritogenic antibody, which induces arthritis in mice (Holmdahl et al., 1986; PMID: 2421741 and Nandakumar et al., 2003; PMID: 12884302). The antibody specificity towards collagen type II was assayed in an ELISA. The antibody was selected for in vivo injection experiments in naive DBA/1 male mice, at no time was any arthritis detected macroscopically after treatment with 0.5, 2 or 5 mg of antibody per animal, however development of synovitis was noticed (Holmdahl et al., 1986; PMID: 2421741). The structure of the Fab fragment was determined by X-ray crystallography. The specificity of the full length CIIC1 antibody and the FV fragment was confirmed by ELISA analysis. Further investigation by using both the full length antibody and a single chain Fv fragment in ELISA experiments revealed that the antibody bound also to other IgG1, IgG2a and IgG2b anti-collagen antibodies (Uysal et al., 2008; PMID: 18241923). The antibody detected collagene type II by western blot analysis (Burkhardt et al., 2005; PMID: 15832289). In vitro studies demonstrated that the antibody together with M2139 antibody suppressed the self-assembly of CII into fibrils (Croxford et al., 2010; PMID: 20225321).

**Antibody First Published in:** Holmdahl et al. Characterization of the antibody response in mice with type II collagen-induced arthritis, using monoclonal anti-type II collagen antibodies. Arthritis Rheum. 1986 Mar;29(3):400-10.

#### PMID:2421741

**Note on publication:** The paper describes the generation and characterization of twenty monoclonal antibodies reactive with type II collagen.

### **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.