

Product number #11310

## Human Anti-COL2A1 Antibody (CIIC1)

### Description

Affinity purified chimeric human-mouse monoclonal anti collagen II (COL2A1) antibody clone CIIC1 in PBS. The CIIC1 antibody binds specifically to the C1 epitope on triple helical type 2 collagen. This clone has been used in applications including ELISA, immunohistochemistry (IHC) and *in vivo* functional studies such as collagen antibody induced arthritis<sup>1-3</sup>.

### Target with alternative names

COL2A1, Collagen alpha-1(II) chain, CII, Col II. UniProt: [P28481](#).

### Immunogen

The antibody clone CIIC1 originates from B cells of collagen type 2 immunized DBA/1 mice<sup>1-3</sup>.

### Epitope

The CIIC1 antibody binds to the C1 epitope (position 358–363; GARGLT) on triple helical type 2 collagen<sup>4,5</sup>.

### Species reactivity

Mouse, rat, chicken, horse, baboon

### Isotype

Human IgG1,  $\kappa$

### Concentration

1 mg/ml

### Sizes available

100 $\mu$ g and 1mg

### Supplied in

PBS

### Storage

Centrifuge briefly prior to opening vial. Store at +4 °C short term (1-2 weeks). Aliquot and store at -20 °C long term. Avoid repeated freeze/thaw cycles.

### Recommended dilution

It is recommended the user determines the optimal dilution for their application. The typical starting working dilution for IHC is 1:100 and 1:1000 for ELISA.

*For Research Use Only. Not for use in diagnostic procedures.  
Not for resale without express authorization.*

### References

1. Holmdahl, R., 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. 29: 400–410. PMID: [2421741](#).
2. Nandakumar KS, et al. Collagen type II-specific monoclonal antibody-induced arthritis in mice: description of the disease and the influence of age, sex, and genes. *Am J Pathol.* 2003 Nov;163(5):1827-37. PMID: [14578183](#).
3. Nandakumar KS, et al. Collagen type II (CII)-specific antibodies induce arthritis in the absence of T or B cells but the arthritis progression is enhanced by CII-reactive T cells. *Arthritis Res Ther.* 2004;6(6):R544-50. PMID: [15535832](#).
4. Uysal H, et al. The crystal structure of the pathogenic collagen type II-specific mouse monoclonal antibody CIIC1 Fab: structure to function analysis. *Mol Immunol.* 2008 Apr;45(8):2196-204. PMID: [18241923](#).
5. Böiers U, et al. Collagen type II is recognized by a pathogenic antibody through germline encoded structures. *Eur J Immunol.* 2008 Oct;38(10):2784-95. PMID: [18825755](#).

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