

**AM26375PU-N****Monoclonal Antibody to Collagen Type II - Purified****Alternate names:** COL2, Collagen II**Quantity:** 0.1 mg**Concentration:** 0.1 mg/ml**Background:** Collagen is a structural protein in bone, cartilage and connective tissue. Collagen type II (CII) is the major collagen of the nucleus pulposa (a component of spine), cartilage and vitreous (a component of the eye). The most commonly used animal model for rheumatoid arthritis (RA) is the collagen-induced arthritis (CIA). Transfer of collagen type II specific monoclonal antibodies induces an acute form of arthritis (collagen type II antibody induced arthritis, CAIA).**Uniprot ID:** [P02458](#)**NCBI:** [NP\\_001835.3](#)**GeneID:** [1280](#)**Host / Isotype:** Mouse / IgG2a**Recommended Isotype Controls:** AM03096PU-N**Clone:** CIIC1**Format:** **State:** Liquid 0.2 µm filtered Ig fraction  
**Purification:** Protein Chromatography  
**Buffer System:** PBS  
**Stabilizers:** 0.1% BSA**Applications:** **Immunohistochemistry on Frozen Sections:** The typical starting working dilution is 1/10.**Immunohistochemistry on Paraffin Sections:** The typical starting working dilution is 1/10.**Functional Assays.****Immunoassays** (Coating + Detection).

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** The monoclonal antibody CIIC1 reacts with the C1 epitope (triple helical position 358-364) of collagen type II. It has been shown to induce CAIA in naïve mice after injection of lipopolysaccharide (LPS). However, in combination with the monoclonal antibody M2139, binding to the J1 epitope of CII, the pair of monoclonal antibodies induce arthritis in different strains of mice without any other stimulants. The presence of secondary stimulus, LPS, increases the disease incidence and severity. The monoclonal antibody CIIC1 is cross reactive with Rat, Bovine, Chicken and Human CII.**Species Reactivity:** **Tested:** Human, Mouse, Rat Chicken, Bovine.

**Storage:**

Store undiluted at 2-8°C.

**DO NOT FREEZE!**

Shelf life: one year from despatch.

**General Readings:**

1. Nandakumar KS, Svensson L, Holmdahl R. 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. PubMed PMID: 14578183.
2. Nandakumar KS, Bäcklund J, Vestberg M, Holmdahl R. 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. Epub 2004 Sep 23. PubMed PMID: 15535832.