

# Immunization Grade Porcine Type II Collagen, Lyophilized

Catalog # 20031

*For Research Use Only - Not Human or Therapeutic Use*

DESCRIPTION:	Highly purified type II collagen (treated with 3M guanidine, DEAE-cellulose and Na <sub>2</sub> HPO <sub>4</sub> )
APPLICATION:	Can be used for various purposes, such as a standard for collagen analysis by SDS-gel, substrate for MMP-1, MMP-8 and MMP-13, and as an antigen for immunizing animals for the induction of collagen-induced arthritis (CIA) in certain species and strains of experimental animals.
QUANTITY:	10 mg
FORM:	Lyophilized powder
SOURCE:	Porcine articular cartilage
MOLECULAR WEIGHT:	300 Kd
PURITY:	>99% by SDS-PAGE, free of pepsin and proteoglycans
SOLUBILITY:	Soluble in acidic buffer (maximum 4 mg/mL), but difficult to dissolve in neutral buffer. In order to dissolve this product in a neutral buffer, use 0.01M or 0.05M acetic acid to dissolve the collagen at 1-4 mg/mL and then add this collagen solution to a desired neutral buffer such as 2-10X Tris-NaCl (the final concentration of NaCl: 0.15-0.2M) or dialyze against 1X neutral buffer at 4°C.

Note 1: To avoid fibril formation under neutral conditions, keep solution on ice.

Note 2: The physicochemical property of type II collagen differs from type I collagen, and type II collagen dissolved in a neutral buffer does not form stable gel with incubation at 37°C. In order to prepare a type II collagen gel, additional components such as type I collagen or other substances might be required.

STORAGE TEMPERATURE:	4°C in the dark
STABILITY:	2 years
REFERENCES:	Trelstad R. et al. Biochemistry 9: 4993-4998 (1970) Miller EJ. Biochemistry 10: 1652-1659 (1971) Trentham DE. et al. J. Exp. Med. 146: 857-868 (1977) Wooley PH. et al. J. Immunology 135: 2443-2451 (1985)

AMSBIO | [www.amsbio.com](http://www.amsbio.com) | [info@amsbio.com](mailto:info@amsbio.com)

 **UK & Rest of the World**  
184 Park Drive, Milton Park  
Abingdon OX14 4SE, UK  
T: +44 (0)1235 828 200  
F: +44 (0) 1235 820 482

 **North America**  
1035 Cambridge Street,  
Cambridge, MA 02141  
T: +1 (617) 945-5033 or  
T: +1 (800) 987-0985  
F: +1 (617) 945-8218

 **Germany**  
Bockenheimer Landstr. 17/19  
60325 Frankfurt/Main  
T: +49 (0) 69 779099  
F: +49 (0) 69 13376880

 **Switzerland**  
Centro Nord-Sud 2E  
CH-6934 Bioggio-Lugano  
T: +41(0) 91 604 55 22  
F: +41(0) 91 605 17 85