

Immunization Grade Sheep Type II Collagen, Lyophilized

Catalog # 20081

For Research Use Only - Not Human or Therapeutic Use

DESCRIPTION:	Highly purified type II collagen (treated with 3M guanidine, DEAE-cellulose, and Na ₂ HPO ₄)
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 developing anti-sheep type II collagen antibodies.
QUANTITY:	5 mg
FORM:	Lyophilized powder
SOURCE:	Sheep articular cartilage
MOLECULAR WEIGHT:	300 kDa
PURITY:	>95% by SDS-PAGE, free of pepsin and proteoglycans (Figure 1)
STORAGE:	4°C in the dark
STABILITY:	1 year
NOTES:	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, first dissolve collagen in 0.01M or 0.05M acetic acid at 1-4 mg/ml and then add this collagen solution to the desired neutral buffer such as 2-10X Tris-NaCl (NaCl final concentration: 0.15-0.2M) or dialyze against 1X neutral buffer at 4°C.

Chondrex, Inc. offers Cat # [9075](#), Collagen Solubilizing Buffer (0.05M acetic acid), as a companion product for dissolving or diluting collagen.

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 a stable gel incubating at 37°C. In order to prepare a type II collagen gel, additional components such as type I collagen or other substances may be required.

Figure 1 - 6% SDS gel analysis of sheep type II collagen (1.25 µg/lane), non-reducing conditions

REFERENCES: N/A

