

## 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 <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 developing anti-sheep type II collagen
QUANTITY:	5 mg
FORM:	Lyophilized powder
SOURCE:	Sheep articular cartilage
MOLECULAR WEIGHT:	300 Kd
PURITY:	>95% by SDS-PAGE, free of pepsin and proteoglycans (Figure 1)
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.
STORAGE TEMPERATURE:	4°C in the dark
STABILITY:	1 year

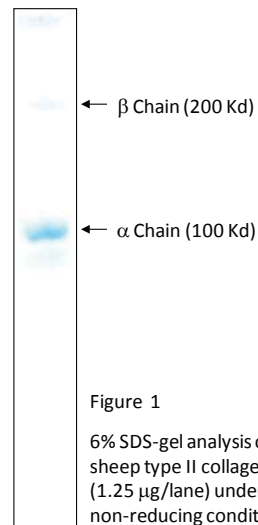


Figure 1

6% SDS-gel analysis of sheep type II collagen (1.25 µg/lane) under non-reducing condition

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.