

## Immunization Grade Goat Type II Collagen, Lyophilized

Catalog # 20071

*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:** 5 mg

**FORM:** Lyophilized powder

**SOURCE:** Goat articular cartilage

**MOLECULAR WEIGHT:** 300 kDa

**PURITY:** >95% by SDS-PAGE, free of pepsin and proteoglycans (Figure 1)

**STORAGE:** 4°C in the dark

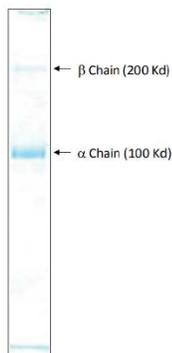
**STABILITY:** 1 year

**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.

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 goat type II collagen (1.25 µg/lane), non-reducing conditions.



**REFERENCES:** N/A